92-90

No.

Supreme Court, U.S.
FILED
JUL 13 1992
OFFICE OF THE CLERK

In the Supreme Court of the United States

OCTOBER TERM, 1992

VIRTUAL MAINTENANCE, INC., PETITIONER

v.

PRIME COMPUTER, INC., RESPONDENT

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Sixth Circuit

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PETITION FOR A WRIT OF CERTIORARI

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QUESTIONS PRESENTED

1. Whether, in an antitrust action—nearly identical to *Eastman Kodak Co.* v. *Image Technical Services, Inc.*, 112 S. Ct. 2072 (1992)—alleging a tying arrangement between computer software support and hardware maintenance, the court of appeals erred by holding that (a) the support service aftermarket for a single brand of computer software cannot constitute a relevant tying market; (b) maintenance for a single brand of hardware cannot constitute a relevant tied market; and (c) a seller with an 11% share of the original software market necessarily lacks power in the distinct market for software support, despite substantial evidence that an appreciable number of consumers are locked in to the tying product (software support) and are forced to buy tied products.

2. Whether a general jury verdict based on alternate legally sound theories must be set aside whenever one of the legally sound theories is not supported by sufficient evidence.

PARTIES TO THE PROCEEDING AND RULE 29.1 STATEMENT

All of the parties to the proceeding are listed in the caption.

Petitioner Virtual Maintenance, Inc., has no non-wholly-owned subsidiaries. It is one of seven privately held companies known collectively as The Virtual Group.

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PETITION FOR A WRIT OF CERTIORARI

Virtual Maintenance, Inc., respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Sixth Circuit in this case.

OPINIONS BELOW

The opinion of the court of appeals (App., *infra*, 1a-24a) is reported at 957 F.2d 1318. The opinion of the district court denying summary judgment (App., *infra*, 28a-38a) is reported at 735 F. Supp. 231.

JURISDICTION

The court of appeals entered its judgment on February 27, 1992 (App., *infra*, 1a). The court of appeals denied a petition for rehearing on April 13, 1992 (App., *infra*, 39a). The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

STATUTORY PROVISION INVOLVED

Section 1 of the Sherman Act, 15 U.S.C. § 1, provides, in relevant part: "Every contract, combination * * *, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal."

STATEMENT

This case involves the adoption by the United States Court of Appeals for the Sixth Circuit of the same approach to determining relevant markets and assessing market power in tying cases that this Court subsequently rejected in *Eastman Kodak Co.* v. *Image Technical Services, Inc.*, 112 S. Ct. 2072 (1992). Indeed, the *Kodak* dissent cited this case as an example of the analysis that the majority was rejecting. *Id.* at 2100 (Scalia, J., dissenting). Contrary to the principles confirmed in *Kodak*, the Sixth Circuit ignored "actual market realities" (*id.* at 2082) in analyzing tied and tying markets, and in particular premised its analysis on the misconception that an aftermarket for a single brand of a product can never be a relevant market for antitrust purposes.

Petitioner Virtual Maintenance, Inc., a provider of computer hardware maintenance services, won a general jury verdict against respondent Prime Computer, Inc. Virtual's claim was that Prime had enforced a tying arrangement in violation of Section 1 of the Sherman Act. Prime refused to provide software support[1] for CAD/

[1] For simplicity, we refer to software revisions, modifications, updates, and user support services collectively as "software support." The term "RMUS" was also used in the courts below to describe the same collection of products and services. We follow the district court and the court of appeals in using the term "Ford-required CAD/CAM" to refer to Computer Aided Design/Computer Aided Manufacturing ("CAD/CAM") applications software that Ford Motor Company required its suppliers of design and engineering services to use. See, *e.g.*, App., *infra*, 5a, 26a. CAD/CAM allows designers and engineers to draft directly on a computer in three dimensions and with extreme precision, and to transmit their de-

CAM software, and particularly for Ford-required CAD/CAM software, unless the computer users also purchased hardware maintenance from Prime.

The court of appeals reversed, however, based on three essential holdings. First, it held that a tying-product market definition limited to software support for "Ford-required CAD/CAM" was too narrow as a matter of law because it encompassed only "a single manufacturer's brand of software." App., *infra*, 14a. Second, the court of appeals held that, for the same reason, the market for maintenance of a single brand of computer hardware (Prime's "50 Series" computers) could not be the relevant tied-product market. *Id.* at 23a. Third, the court held that Prime's lack of power in the market for *original* CAD/CAM software sales precluded as a matter of law the possibility that Prime possessed economic power in the distinct CAD/CAM software *support* aftermarket, despite substantial evidence that Prime could and did force many locked-in buyers of its software support to purchase hardware maintenance from Prime against their will. *Id.* at 13a.

The Sixth Circuit's decision cannot be reconciled with this Court's decision in *Kodak*. The dramatically different results are particularly inappropriate because the two cases are practically identical. This case involves the same tied product as *Kodak*: hardware maintenance for a single brand of equipment. This case also involves the exact same kind of tie as *Kodak*: consumers who wanted the tying product (software support or parts) were required to purchase hardware maintenance from the manufacturer even though independent service organizations could supply better maintenance service at a lower price. Finally, this case involves the same kind of tying product as *Kodak*: revisions and updates for any particular CAD/CAM software that a consumer has already pur-

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signs electronically to the computers that control the manufacturing process. C.A. App. 1424, 1469-1470.

chased are unique, as are the parts needed after the initial purchase of Kodak copying or micrographic equipment.

The Sixth Circuit's analysis of those facts closely parallels the reasoning that Kodak advanced and this Court rejected. First, in *Kodak* this Court held that the aftermarkets in parts and services for a single manufacturer's brand of equipment may be relevant markets for antitrust purposes despite a competitive market for the equipment itself. Second, in *Kodak* this Court reemphasized the primary significance of actual conditions in a particular market, and especially of the presence of forcing and a locked-in consumer base, in determining whether a seller possesses economic power in the tying-product market. The Sixth Circuit, however, held in this case that clear evidence of forcing was irrelevant to the question of economic power in the absence of a threshold finding of a high market share.

A. Factual Background

Prime manufactures and sells computer systems for industrial and commercial use. App., *infra*, 2a-3a; see C.A. App. 442-443. In addition, Prime offers hardware maintenance services, distributes software for its systems, and provides software support for the software it distributes. App., *infra*, 2a-3a. Prime's aftermarket service revenues (that is, hardware maintenance for its brand of computers along with software support for programs that run on those computers) amount to more than $500 million annually; hardware maintenance for the 50 Series computer alone accounted for more than one-quarter billion dollars. C.A. App. 722.

Prime is the leading supplier of CAD/CAM software to the automotive industry (C.A. App. 442), and its 11% market share makes Prime the second largest vendor of CAD/CAM software in the world (App., *infra*, 3a; C.A. App. 442). One of Prime's CAD/CAM software

products is a program called PDGS (Product Design Graphic System), which was created by Ford Motor Company. App., *infra*, 3a. Prime is licensed as the exclusive distributor of PDGS. *Ibid.*[2]

PDGS at the relevant time ran only on Prime 50 Series minicomputers. App., *infra*, 3a. No existing program translates data between other CAD/CAM applications and PDGS with sufficient accuracy for Ford's purposes. C.A. App. 1373, 1426, 1486-1487. Ford's automotive design capabilities therefore depend on Prime computers and on PDGS. C.A. App. 1492-1494.

Converting Ford's CAD/CAM system to run on another manufacturer's computers and software would be economically irrational. David Wood, Manager of Computer Aided Technology for Ford's North American Automotive Operations, testified that conversion "very well could cost near a billion dollars" and would so devastate Ford financially and technically that it could not "stay a competitive auto manufacturer in the world market." C.A. App. 1733.

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[2] There appears to be some confusion on this subject in the opinions below. The court of appeals, for example, stated that Prime was the exclusive distributor only of "a *modified version* of PDGS used in automotive design" and that "*Ford's version of* PDGS runs only on Prime's 50 Series minicomputers." App., *infra*, 3a (emphasis added). In fact, *PDGS* is a Ford product and at the relevant time functioned only on Prime 50 Series minicomputers. C.A. App. 1435-1436, 1473-1474; cf. *id.* at 1689, 1724 (incomplete versions of PDGS run experimentally on other hardware). This fact has never been in dispute. See, *e.g.*, Prime C.A. Br. 7 (noting Ford "undertak[ing]"—not completed effort—to make PDGS function on other hardware). Likewise, Ford's version of PDGS was the only version. The court thus misstated the undisputed facts. In any event, the court's obligation, in light of the general jury verdict in favor of Virtual, was to resolve disputed questions of fact in Virtual's favor, *Texaco Inc.* v. *Hasbrouck*, 496 U.S. 543, 547 (1990), and give Virtual "the benefit of all inferences which the evidence fairly supports, even though contrary inferences might reasonably be drawn," *Aspen Skiing Co.* v. *Aspen Highlands Skiing Corp.*, 472 U.S. 585, 604 (1985).

Ford could not economically license another vendor to distribute PDGS updates and other software support, because the PDGS updates necessarily correlate with improvements in Prime's hardware, C.A. App. 1672-1673, as well as in Prime's proprietary operating system (Primos) and communications software (Primenet). It is impractical for Ford to withdraw Prime's license to market the PDGS updates because of Ford's complex relationship with Prime and particularly its dependence on Prime's expertise about its own equipment and programs. See *id.* at 1492-1497.

Ford's design service suppliers are locked in to the PDGS updates that Prime distributes. C.A. App. 1430-1431, 1477-1478, 1535, 1728. Modern design and production efficiency requires the electronic communication of CAD/CAM data between Ford and its suppliers. *Id.* at 1430-1431, 1470-1471. Because of the inadequacy of translator programs, Ford requires its design service suppliers to use the same version of PDGS as Ford uses, with all current updates and modifications. App., *infra*, 16a; C.A. App. 500-525, 1418; Tr. 774. A supplier that does not use a sufficiently current version of PDGS will not be considered at all for some projects, and will be at a disadvantage against its competitor suppliers when bidding for other jobs. C.A. App. 1430-1431, 1487, 1728; see App., *infra*, 29a.

Prime has long exploited this lock-in as a vehicle to help Prime control the hardware maintenance market for Prime 50 Series computers. Although Prime sells PDGS software support in conjunction with hardware maintenance for $16,000 per year for each PDGS installation, Prime charges $80,000 for each semi-annual PDGS update that is purchased separately from hardware maintenance. App., *infra*, 4a; see also C.A. App. 588, 603-604, 1407. Thus a user who desired to purchase hardware maintenance from a competitor of Prime would have to pay ten times as much for PDGS updates and would

have to pay still more for any other software support needed. The court of appeals described this differential as "prohibitive" (App., *infra*, 5a), and held that "[a] tying arrangement clearly exists here" (*id.* at 7a).[3] The tying arrangement is not limited to Ford-required CAD/CAM, or even CAD/CAM. Prime imposes similar ties on support service for 108 of the 127 software packages it distributes for the 50 Series line, C.A. App. 1653, taking advantage of users of other types of software who are locked in to their investment in Prime computers and Prime software. *E.g.*, C.A. App. 1345 (American States Insurance Company); *id.* at 1358, 1530 (National Bank of Detroit).

Prime's policies have helped it to hold a 97% worldwide market share in the maintenance of its own hardware models (see C.A. App. 722), while returning a 60% gross margin on its hardware maintenance revenues (Tr. 721). Although Prime's policies would appear to be equally vulnerable to legal challenge everywhere, this case involves only the Michigan-Ohio-Indiana region, where Virtual attempted to compete with Prime (C.A. App. 1287). In that region alone, the 50 Series hardware maintenance market is projected to yield a $60 million profit over five years. C.A. App. 1646-1658. In a post-trial hearing Prime admitted that it would expect annual revenues of $3,000,000 from the hardware maintenance of only 150 of the computers using PDGS. C.A. App. 1903.[4]

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[3] Prime's practices contrast with those of other computer manufacturers. Most do not tie software support and hardware maintenance at all; the two or three companies that do so employ tactics much less coercive than Prime's, raising the software support price only 30-50% for customers who do not also purchase hardware maintenance services. C.A. App. 1544-1545.

[4] The court of appeals mistakenly asserted that only 350 to 400 Prime 50 Series computers were *capable* of running PDGS. App., *infra*, 4a; see also *id.* at 5a, 24a. Nothing in the record supports that statement. PDGS runs on all 50 Series machines; the cited

Virtual has provided hardware maintenance and service in Michigan since 1983.[5] C.A. App. 1287, 1291, 1306. Before challenging Prime, Virtual had entered the markets for service of Lundy graphics terminals and MAI Basic IV computers, both of which had been serviced in Virtual's territory almost exclusively by the manufacturers; Virtual quickly garnered a 50% share of each market. C.A. App. 1299-1301. The Lundy graphics terminal is a peripheral device that must be used on Prime 50 Series machines running PDGS (C.A. App. 1287, 1295-1296), as Prime itself specifies (C.A. App. 444).

The Lundy maintenance business brought Virtual many customers who owned Prime 50 Series computers and used PDGS. C.A. App. 1287, 1295-1296. In April 1989 Virtual entered the market for the maintenance of Prime 50 Series computers (App., *infra*, 4a), pricing its service 20% below Prime's fees (C.A. App. 1306). Many potential 50 Series customers expressed interest in Virtual's service, but almost all of the prospects felt constrained not to switch hardware maintenance providers because of Prime's stranglehold on the software support. App., *infra*, 4a; C.A. App. 1058-1271 (customer contact reports), 1341-1359, 1376, 1427-1429, 1434-1437, 1529-1530. Only a handful of users, all of whom had no need to keep their software current, signed up with Virtual despite the tie. C.A. App. 1363. Once the tie was lifted by the injunction of the district court, however, customers

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number denoted *actual users* of PDGS. See C.A. App. 443-444, 1814. The more fundamental point, in any event, is that Prime has captured the multimillion-dollar annual maintenance business for those consumers who use PDGS. It is no comfort to *those* consumers that others, who use the Prime 50 Series computers for other purposes, might have a broader choice of service providers.

[5] When it began to offer maintenance for Prime 50 Series computers, Virtual expanded into Indiana and Ohio (C.A. App. 1287), but had to close its offices in those States when it could not obtain business because of Prime's tying arrangement (*id.* at 1656). Virtual does have some customers in Ohio.

flocked to Virtual's hardware maintenance service; within Michigan, Virtual soon was servicing 63% of the Prime 50 Series computers that used Ford-required CAD/CAM. Affidavit of Alex Violassi, *Virtual Maintenance, Inc.* v. *Prime Computer, Inc.*, No. A-778 (April 23, 1992) (Stevens, J., in chambers) (denying stay).

B. Proceedings Below

Virtual sued Prime in the Eastern District of Michigan, alleging that Prime's linkage of software support with hardware maintenance constituted an illegal tying arrangement under Section 1 of the Sherman Act. The district court denied Prime's motion for summary judgment (App., *infra*, 28a-38a), and the case proceeded to trial.

The district court submitted three tying theories to the jury, two involving claims of per se illegality and one proceeding under the rule of reason.[6] Under the first theory, Prime committed a per se violation by using its power in the general worldwide market for CAD/CAM software support in order to foreclose competition in the market for maintenance of Prime 50 Series computer hardware. The second per se theory rested on Prime's

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[6] A tying arrangement, or tie-in, is "an agreement by a party to sell one product but only on the condition that the buyer also purchases a different (or tied) product, or at least agrees that he will not purchase that product from any other supplier." *Eastman Kodak Co.* v. *Image Technical Services, Inc.*, 112 S. Ct. 2072, 2079 (1992). A tying arrangement may violate the antitrust laws either "per se" or under a rule-of-reason analysis. A per se tying violation has three elements. First, the tying arrangement must link two distinct products or services trading in different markets. *Jefferson Parish Hosp. Dist. No. 2* v. *Hyde*, 466 U.S. 2, 18-19 (1984). Second, the seller must have "appreciable economic power" in the tying market. *Kodak*, 112 S. Ct. at 1079. Third, the tying arrangement must affect "a substantial amount of commerce in the tied market." *Ibid.* A tying arrangement is a violation under the rule of reason only if the tie unreasonably restrains competition in the tied market. *Jefferson Parish*, 466 U.S. at 17-18.

use of its power in the market for Ford-required CAD/CAM software support in order to foreclose competition in the 50 Series hardware maintenance market. The final theory postulated a rule-of-reason violation based on the anticompetitive effects of Prime's tying policy on the same hardware maintenance market.

After a five-week trial, the jury returned a general verdict in favor of Virtual and assessed $8,453,000 in compensatory damages, reflecting an expert estimate of Virtual's lost income from 1989 through 1993. See C.A. App. 733, 1568-1595. The district court trebled the damages to $25,359,000, enjoined Prime from enforcing the contract provision that established the tie within the Ford-required CAD/CAM market, and voided all Prime contracts in that market that contained the tying provision. App., *infra*, 25a-27a. Prime subsequently was held in contempt for refusing to release the vast majority of its PDGS customers from the tying provision. *Virtual Maintenance, Inc.* v. *Prime Computer, Inc.*, No. 89 CV 71762 DT (Sept. 5, 1991) (modified order adopting magistrate judge's recommendation, C.A. App. 355-381).

On appeal, Prime argued that it lacked market power. With respect to the general CAD/CAM market, Prime argued that the evidence of market power was insufficient. Prime C.A. Br. 22-25; see also Prime C.A. Reply Br. 4 ("No reasonable jury could find that so small a market share conferred the kind of market power required for per se liability in a tying case."). With respect to the Ford-required CAD/CAM market, Prime advanced several bold propositions *of law*: one product brand can *never* constitute a market (Prime C.A. Br. 26-29); customer preference can *never* "define" an antitrust market (*id.* at 29-31); "mere" customer preference cannot render a product "unique" (*id.* at 31-32). Virtual responded, among other things, that the Ninth Circuit's decision in the *Kodak* case then pending on certiorari before this Court, correctly rejected Prime's argument that main-

tenance of a single brand can be disregarded as a relevant market without attention to the evidence in a particular case. Virtual C.A. Br. 22-23 nn.16 & 17. Prime's reply brief (at 13-14 n.14) adopted wholesale the position of the Solicitor General in seeking reversal of the *Kodak* decision; indeed, Prime submitted the Solicitor General's *Kodak* brief in its entirety to the Sixth Circuit as an "addendum" to the reply brief.

The Sixth Circuit reversed. The court acknowledged that two separate products had been tied. Furthermore, it was uncontested that an appreciable amount of commerce was affected. Nevertheless, the court held that Prime did not have sufficient economic power in a relevant tying market to support a claim that the tie-in was illegal per se. First, the court of appeals denied that economic power in the tying market ever could be inferred from proof that the tied product was actually forced on unwilling consumers of the tying product. App., *infra*, 9a. Turning to the two alternative tying-product markets presented to the jury, the court held that neither could support a jury verdict finding a per se violation. The court of appeals found no legal error in the definition of the tying market as CAD/CAM software support generally, but it held that the evidence could not support a finding of market power. *Id.* at 12a. Using a single-factor analysis, the court concluded that Prime's 11% share of the market for initial CAD/CAM software applications in itself precluded any economic power in the general CAD/CAM aftermarket. *Ibid.*

The court of appeals also rejected the definition of the tying market as Ford-required CAD/CAM software support "because this market is limited to PDGS, a single manufacturer's brand of software." *Id.* at 14a. According to the Sixth Circuit, "Courts * * * consistently reject market definitions limited to a single manufacturer's products because such markets do not reflect interbrand competition." *Id.* at 14a-15a.

Finally, the court rejected Virtual's rule-of-reason claim on the ground that the tied-product market could not be limited to maintenance for Prime 50 Series computers. *Id.* at 23a. The court of appeals held that Virtual had presented insufficient evidence that Prime's tie-in had anti-competitive effects in the general market for computer hardware maintenance, despite the proven foreclosure of at least 350 Prime 50 Series PDGS users accounting for $7 million annually in hardware maintenance revenue. *Id.* at 24a; C.A. App. 1903.

Virtual's petition for rehearing with suggestion of rehearing en banc, which again noted the pendency of *Kodak* in this Court, was denied. App., *infra*, 39a.

REASONS FOR GRANTING THE PETITION

Virtual should not be deprived of its jury verdict when the court of appeals' justification for reversal rests on reasoning that contradicts this Court's subsequent pronouncements on the controlling issues. No significant part of the analysis of the court of appeals can survive this Court's decision in *Eastman Kodak Co.* v. *Image Technical Services, Inc.*, 112 S. Ct. 2072 (1992). Indeed, the dissenting opinion in *Kodak* cited the Sixth Circuit's decision as having been interred by the opinion for the Court. *Id.* at 2100 (Scalia, J., dissenting). Because the court of appeals not only reversed the jury verdict but also directed the entry of judgment in Prime's favor (App., *infra*, 24a), this Court should not allow the judgment below to stand if it believes that the court of appeals' analysis of *any* one of Virtual's theories conflicts with *Kodak*. In fact, the court of appeals' analysis of *every* one of Virtual's theories conflicts with *Kodak*, and the court committed other glaring errors as well.

The tying arrangement in this case closely parallels that challenged in *Kodak*—an arrangement that this Court insisted should be submitted to the scrutiny of a jury under a per se theory. The tied product in *Kodak* was

the maintenance of Kodak copiers and micrographic equipment; here, too, the tied product was equipment maintenance, this time for Prime 50 Series computer hardware. In *Kodak*, the tying product was parts for Kodak copiers and micrographic equipment that had already been purchased by Kodak's customers; in this case, the tying product was software support for CAD/CAM programs after the initial sale of that software.

In both *Kodak* and the present case, the defendant claimed that it could not have economic power in an aftermarket if it did not have power in the market for the original purchase of the product. Kodak insisted unsuccessfully that it could not control the market for parts unless it had market power over copier and micrographic equipment purchases. Prime likewise maintained, and the court of appeals agreed, that Prime could not have power in the markets for *support* of either general or Ford-required CAD/CAM software unless it had power in the market for *original* purchases of CAD/CAM software.

The chief distinction between this case and *Kodak* is that Virtual's claim already has been submitted to a properly instructed jury, which found that Virtual had proved its case. The legal issues are nearly identical, and the Sixth Circuit's erroneous reasoning cannot obscure the similarities. This Court should grant certiorari, vacate the judgment, and remand the case to allow the Sixth Circuit to conform the holding and result in this case to the precepts set down in *Kodak*; in the alternative this Court should grant certiorari in order to clarify the application of *Kodak* in the context of a fully developed trial record.

If any one theory submitted to the jury was sustainable, then obviously the Sixth Circuit was wrong to direct the entry of judgment for Prime, and its judgment should not be allowed to stand in light of *Kodak*. If, as we contend, *every* theory submitted to the jury was sustainable,

then just as obviously the Sixth Circuit should have affirmed the jury's verdict outright. The opinion below, however, raises the further issue of what should be done if some but not all of the theories submitted to the jury were sustainable. The court of appeals expressly stated (App., *infra*, 14a) that it was prepared to order a new trial even if it accepted the per se and rule-of-reason theories that depend on the "Ford-required CAD/CAM" market, while rejecting the evidence as insufficient to show power in the general CAD/CAM market. That was error. In that situation, the proper course still would be to affirm the jury's general verdict in favor of Virtual. *Griffin* v. *United States*, 112 S. Ct. 466 (1991); *Composite Marine Propellers, Inc.* v. *Van Der Woude*, 962 F.2d 1263, 1992 WL 89083, at *2 (7th Cir. May 4, 1992); *Walther* v. *Lone Star Gas Co.*, 952 F.2d 119, 126 (5th Cir. 1992). The Sixth Circuit's contrary suggestion, if followed on remand, would place that court in square conflict with other circuits. In the interest of judicial economy, this Court should either direct the court of appeals to reconsider its decision in light of *Griffin* as well as *Kodak*, or grant certiorari and address the application of *Griffin* to civil cases.

I. THE DECISION OF THE COURT OF APPEALS CONTRADICTS THE HOLDING IN *KODAK* THAT A DERIVATIVE AFTERMARKET FOR A SINGLE MANUFACTURER'S BRAND OF EQUIPMENT MAY CONSTITUTE A RELEVANT MARKET FOR TIED AND TYING PRODUCTS

In *Kodak* this Court reaffirmed "the proposition that in some instances one brand of a product can constitute a separate market" under the Sherman Act. 112 S. Ct. at 2090. A claim that tying is occurring in "derivative aftermarkets" changes nothing, as those markets are no different from "every other separate market." *Id.* at 2090 n.29. The *Kodak* decision flatly contradicts the analysis of the Sixth Circuit, which refused to recognize as a relevant

market any aftermarket deriving from a single manufacturer's product. That misconception of the nature of markets—and the resulting erroneous judgment—cannot stand in the wake of *Kodak*.

A. The Market For Software Support For Ford-Required CAD/CAM Is a Relevant Tying-Product Market

1. The decision in *Kodak* establishes that single-brand aftermarkets can be relevant markets for tied or tying products, and for other antitrust purposes. The proper market definition depends on "a factual inquiry into the 'commercial realities' faced by consumers," 112 S. Ct. at 2090 (quoting *United States* v. *Grinnell Corp.*, 384 U.S. 563, 572 (1966)), and so the relevant market in *Kodak* was "determined by the choices available to Kodak equipment owners," *ibid.* Thus "one brand of a product can constitute a separate market" where, from the consumer's point of view, there are no reasonably interchangeable substitutes (*id.* at 2090 & n.30); as an illustration this Court approvingly cited several decisions that limited a market to "parts for a particular brand of equipment." *Id.* at 2090 n.31.

The Sixth Circuit honored the contrary premise, announcing that "the market definition of 'Ford-required CAD/CAM' *must* fail because this market is limited to PDGS, a single manufacturer's brand of software." App., *infra*, 14a (emphasis added). On that ground the court of appeals held that the district court erred in submitting the Ford-required CAD/CAM *aftermarket* to the jury for evaluation as a potential relevant tying market. *Ibid.* That holding cannot be squared with *Kodak*, and by itself requires that the judgment be vacated.

2. Because the Sixth Circuit's categorical rejection of single-brand markets conflicts so starkly with *Kodak*, the court's legal error is sufficient to justify a remand. That was only one of several related errors, however. Virtual

presented substantial factual arguments to show the appropriateness of defining a relevant market as support for Ford-required CAD/CAM. The court of appeals treated those arguments as mere "attempts to avoid" supposedly controlling authority precluding single-brand markets. *Id.* at 15a.[7] Accordingly, the court viewed Virtual's proofs of the separateness of that aftermarket to be inherently inadequate if not irrelevant. Furthermore, many elements of the court of appeals' dismissive reasoning run directly contrary to this Court's statements of the law in *Kodak* and earlier cases.

Apparently confusing the initial selection of a CAD/CAM program with the purchase of software support for an already-purchased program, the court of appeals claimed that Ford-required CAD/CAM could not be a relevant market because *the* proper market necessarily was "all CAD/CAM software reasonably interchangeable with PDGS." App., *infra*, 17a. That statement followed on the heels of another declaration that the Sixth Circuit would under no circumstances "ignore interbrand competition by limiting the product market to one manufacturer's product." *Id.* at 16a. That mistaken view of the law led the court to ignore the substantial evidence that no other CAD/CAM could be reasonably interchangeable with PDGS from the point of view of Ford or its suppliers who were concededly "require[d] * * * to purchase the software updates." *Ibid.* See C.A. App. 1371-1375, 1396, 1430, 1481-1487, 1493-1494, 1704, 1727-1728, 1731-1733.

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[7] Many of the authorities on which the court below relied were cited, along with the decision in this case, in the *Kodak* dissent as decisions with which the majority opinion conflicted irreconciably. Compare App., *infra*, 14a-22a (relying on, among other authorities, *Grappone, Inc.* v. *Subaru of New England, Inc.*, 858 F.2d 792 (1st Cir. 1988); *A.I. Root Co.* v. *Computer/Dynamics, Inc.*, 806 F.2d 673 (6th Cir. 1986); *General Business Sys.* v. *North Am. Philips Corp.*, 699 F.2d 965 (9th Cir. 1983)), with *Kodak*, 112 S. Ct. at 2100-2101 (Scalia, J., dissenting) (citing same cases).

The Sixth Circuit assigned no weight to evidence that, having spent large sums on Prime 50 equipment and PDGS software, Ford suppliers were locked in to PDGS updates and thus to Prime. See C.A. App. 1385-1386, 1557-1558. The court categorically declared instead that "a customer's initial purchase of a particular manufacturer's product does not justify a limited market definition." App., *infra*, 18a.

This Court, however, rejected just that position in *Kodak*, recognizing that lock-ins may restrain aftermarket competition and compel narrower market definitions in appropriate circumstances. "If the cost of switching is high, consumers who already have purchased the equipment, and are thus 'locked-in,' will tolerate some level of service-price increases before changing equipment brands." 112 S. Ct. at 2087.[8]

The court of appeals claimed that Prime's power was "trivial" and that it could not charge "exorbitant" software support prices "because its customers would simply switch to some other manufacturer of PDGS-type software." App., *infra*, 18a. That hypothetical statement about what customers *would* do, however, rested on theory and ignored "the 'commercial realities' faced by consumers." *Kodak*, 112 S. Ct. at 2090 (quoting *United States* v. *Grinnell Corp.*, 384 U.S. 563, 572 (1966)). Overwhelming evidence—presumptively found as fact by the jury—belied the Sixth Circuit's *a priori* postulate that

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[8] The Sixth Circuit's conclusion is not supported even on the premise that "we should measure the tying seller's power at the time that the tie-in agreement came into existence." App., *infra*, 19a (quoting 9 P. Areeda, *Antitrust Law* ¶ 1709c5, at 102 (1991)). The court said that "Ford presumably had many companies to choose from prior to purchasing Prime's equipment," but Ford purchased its Prime hardware, and became locked in, before Prime initiated its tying policy. C.A. App. 526-544 (announcement of tying policy effective 4/1/83), 545-560 (PDGS licensing agreement effective 2/1/83); *id.* at 1674 (Ford began using Prime hardware in 1980-1982).

Ford's suppliers (or Ford) could freely switch to another supplier of software support. C.A. App. 1370-1376 (technological barriers), 1385-1387 (high cost of switching leads to expanded price tolerance), 1430-1431 (supplier must have current PDGS update in order to do business with Ford), 1557-1558 ("substantial investment" in hardware precludes switching in response to "a small increase in the price of hardware maintenance for Prime").

The jury necessarily found that there was no reasonable substitute for PDGS software support, see C.A. App. 1863 (jury instruction); given the substantiality of the evidence supporting that finding, the Sixth Circuit was compelled to credit that view as well. See *Texaco Inc.* v. *Hasbrouck*, 496 U.S. 543, 547 (1990); *Aspen Skiing Co.* v. *Aspen Highlands Skiing Corp.*, 472 U.S. 585, 604 (1985). The jury's judgment that the Ford-required CAD/CAM aftermarket was "sufficiently separate" (*International Boxing Club* v. *United States*, 358 U.S. 242, 252 (1059)) comes well within the boundaries of this Court's tolerance for similar factual findings. See *id.* at 251-252 (upholding factual finding that championship boxing matches were not reasonably interchangeable with non-championship bouts). Whatever ability a supplier (or Ford) some day might have to turn to a competitor of Prime for CAD/CAM software and software support, at the relevant time that prospect provided at most the glimmering *possibility* of a substitute accompanied by efficiency losses and data conversion costs. The Sixth Circuit apparently believed that, given sufficient technological advances and industry changes, and ignoring cost constraints, "[t]here exists at least a potential for a reasonable interchangeability of supply." App., *infra*, 19a. The standard for market definition, however, is *reasonable*, not conceivable, interchangeability. See *Kodak*, 112 S. Ct. at 2090; *United States* v. *E.I. Du Pont de Nemours & Co.*, 351 U.S. 377, 395, 404 (1956).

Other factors, too, supported the conclusion that Ford-required CAD/CAM software support is a separate mar-

ket. The industry perceives that aftermarket as a separate entity, and Ford's design and engineering suppliers form a set of distinct customers. C.A. App. 1372-1376. Prime's prices for PDGS software support increased while prices in other sectors of the industry decreased, and thus the Ford-required CAD/CAM aftermarket was not sensitive to price changes elsewhere in the general CAD/CAM aftermarket. *Id.* at 1381, 1517-1518. Prime's ability to increase prices within this market was patent; its software support prices rose by up to 20% per year. Tr. 1802-1804.

The Sixth Circuit, however, strained to condemn the Ford-required CAD/CAM aftermarket as "unduly narrow" because it was "based solely on one customer's requirements." App., *infra*, 15a. But hundreds of suppliers come within this tying market, obviating the concern that too narrow a market definition might expose a single contract with a single purchaser to antitrust scrutiny. Cf. *Jefferson Parish*, 466 U.S. at 16; 9 P. Areeda, *Antitrust Law* ¶ 1721c1 (1991).

3. The fact that a locked-in third party, Ford, influences the demand for PDGS software support no more invalidates this market than would the presence of any other fact that endowed a particular product with relatively inflexible demand. Cf. *United States* v. *Grinnell Corp.*, 384 U.S. 563, 567, 573-575 (1966) (defining market as "accredited" central station burglary and fire protection service based on preferences of insurance underwriters). The suppliers remain dependent on Ford; Ford cannot reasonably switch from Prime and PDGS, because Ford could not "stay competitive in the auto industry" if it changed. C.A. App. 1733. Ford has little incentive to battle Prime on behalf of the suppliers, C.A. App. 1496-1498, unless Prime's aftermarket service price increases became so huge that the pass-through to Ford (and not merely the burden on suppliers) became noticeable; and no competitor can reasonably replace Prime. Whatever

the genesis of the Ford-required CAD/CAM aftermarket, the economic reality is that Ford-required CAD/CAM software support is not reasonably interchangeable with anything else. By branding the mass of suppliers as mere proxies for Ford, the court of appeals indulged in a semantic diversion that has no bearing on proper market analysis. Given *Kodak*'s emphasis on "the 'commercial realities' faced by consumers," 112 S. Ct. at 2090, that analysis cannot stand.

B. The Market For Maintenance of Prime 50 Series Computers Is a Relevant Tied-Product Market

We have demonstrated that the Sixth Circuit's rationale for refusing to find relevant the Ford-required CAD/CAM aftermarket fails in light of this Court's contrary holding in *Kodak*. We now turn to the disposition of Virtual's claim under the rule of reason. The Sixth Circuit's fleeting analysis of the rule-of-reason claim stands or falls—and it must fall—with the assumption that, as a matter of law, hardware maintenance of the Prime 50 Series could not engender a relevant tied market, an assumption explicitly grounded in the same erroneous analysis that led the court of appeals to reject the Ford-required CAD/CAM aftermarket as a tying market. See App., *infra*, 23a.

This Court demolished that analysis in *Kodak*. Although the *Kodak* opinion did not expressly consider the definition of the tied market with reference to a rule-of-reason claim, this Court rejected the contention that "a single brand of a product or service can never be a relevant market under the Sherman Act" and approved a market definition encompassing only service for a single brand of copier. 112 S. Ct. at 2090. For *all* antitrust purposes, this Court explained, "[t]he relevant market * * * is determined by the choices available to Kodak equipment owners." *Ibid.* The relevant market for the Section 2 attempted-monopolization claim in *Kodak* comprised "only those companies that service Kodak machines" because "service and parts for Kodak equipment

are not interchangeable with other manufacturers' service and parts." *Ibid.*

The court of appeals attempted to justify its approach by asserting that "companies performing hardware maintenance on the Prime 50 Series can easily switch to maintenance of other computers." App., *infra*, 23a. That statement, of course, gets the relevant competitive considerations backwards: the user of a Prime 50 Series computer will obtain the benefits of competition only if maintenance providers for *other* computers can switch their resources *to* provide maintenance on the Prime 50 Series. The ability to move resources *out* of the relevant market—to service other computers rather than Prime computers—has nothing to do with the preservation of competition in that market, yet that ability was the court of appeals' focus.

If the court of appeals had understood, as *Kodak* now teaches, that one must focus on the choices available to owners of the relevant brand of equipment (here, Prime computers), it would have had to acknowledge the substantial evidence showing that Prime's tie foreclosed competition. See, *e.g.*, C.A. App. 1504, 1515-1517. For minicomputers as well as for copiers, service and parts are not interchangeable with other manufacturers' service and parts. See *ibid.* The relevant market thus comprises "only those companies that service [Prime 50 Series] machines," that is, Prime, Virtual, and two extremely small independent service providers. See C.A. App. 722 (Prime has 97% market share), 1554-1556 (apart from Virtual, only two independent companies maintain Prime machines; 16 to 497 companies service machines of other leading manufacturers).

Prime's conduct was proven actually to have restrained competition in a three-state market segment, carving out an impenetrable monopoly—and a $12 million annual profit (C.A. App. 1646-1648)—based on the control of

Ford-required CAD/CAM and other tied software.[9] This "actual adverse effect on competition" (*Jefferson Parish*, 466 U.S. at 31) within a significant, well-defined portion of the relevant tied market further supports Virtual's rule-of-reason claim. The judgment of the court of appeals should be vacated and remanded so that the Sixth Circuit may apply the standards enunciated in *Kodak*.

II. THE COURT OF APPEALS' ANALYSIS OF MARKET POWER OVER SUPPORT FOR GENERAL CAD/CAM SOFTWARE CONFLICTS WITH THE EMPHASIS IN *KODAK* ON FORCING AND MARKET REALITIES

As we explained above, this Court's recognition of single-brand markets in *Kodak* rejects market analysis that rests on artificial and "formalistic distinctions," and correspondingly requires attention to "actual market realities." 112 S. Ct. at 2082. Those same concerns were reflected in this Court's discussion of economic power in tying cases. The requisite "appreciable economic power in the tying market" is "the power 'to force a purchaser to do something that he would not do in a competitive market.'" *Id.* at 2080 (quoting *Jefferson Parish*, 466 U.S. at 14). Although that power "*ordinarily* is inferred from the seller's possession of a predominant share of the market," *id.* at 2081 (emphasis added), market-share analysis is merely an intermediate step to an ultimate conclusion. See *United States* v. *Loew's Inc.*, 371 U.S. 38, 45 (1962) ("Market dominance * * * is by no means the only test of whether the seller has the requisite economic power [in a tying case].").[10] What matters in

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[9] Prime offered support for virtually all its proprietary or licensed applications software only in conjunction with hardware maintenance contracts. Virtual presented substantial evidence that Prime 50 Series owners who did not use CAD/CAM programs considered themselves equally forced to retain Prime for hardware maintenance. C.A. App. 1343-1348, 1409-1412, 1530-1531.

[10] In addition, market power exists if a seller "offers a unique product that competitors are not able to offer." *Jefferson Parish*,

the final analysis is control over the tying product, which is simply "some special ability," *Jefferson Parish*, 466 U.S. at 13, "to force the buyer into the purchase of a tied product that the buyer * * * might have preferred to purchase elsewhere on different terms." *Kodak*, 112 S. Ct. at 2080 n.9 (quoting *Jefferson Parish*, 466 U.S. at 12).

The Sixth Circuit, however, held that Prime's 11% share of the market for initial installations of CAD/CAM software precluded any further analysis of economic power. App., *infra*, 12a. That single-factor analysis mirrors the argument, rejected in *Kodak* (see 112 S. Ct. at 2081-2089), that competition in the interbrand market for copying equipment precluded any analysis of the aftermarkets for that equipment. Even had the Sixth Circuit analyzed the proper market, *i.e.*, the market for CAD/CAM software support, that slavish focus on market share would have been misguided, because "[t]he relative effect of percentage command of a market varies with the setting in which that factor is placed," *United States* v. *Columbia Steel Co.*, 334 U.S. 495, 528 (1948); see also *Loew's*, 371 U.S. at 45.

The Sixth Circuit misread *Jefferson Parish* to require that the seller have at least a 30% share of the tying-product market before a tie can be condemned. See App., *infra*, 12a (citing *Jefferson Parish*, 466 U.S. at 26). This Court, however, did not cease its inquiry in *Jefferson Parish* after holding that the tying seller's 30% market share could not *by itself* establish market power. 466 U.S. at 27. Instead, this Court examined whether any forcing had actually taken place. It ultimately determined that the *Jefferson Parish* defendant lacked eco-

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466 U.S. at 17. A product that is "prized by those who purchase[] or lease[] it and [i]s frequently essential to their business activities," *id.* at 17 n.26 (quoting *Northern Pacific Ry. Co.* v. *United States*, 356 U.S. 1, 7 (1958)), gives the seller "a unique kind of bargaining power" that may allow it to "fence[] out competition," *id.* at 17.

nomic power only after concluding, on the basis of factors peculiar to the market at issue, that consumers were not really "forced" at all into accepting a product they otherwise would have purchased elsewhere. *Id.* at 27-29.

The whole point of the inquiry into economic power in the tying market is to assess whether economic conditions make forcing "likely" when a seller uses a tying arrangement. *Jefferson Parish*, 466 U.S. at 16; cf. *FTC* v. *Indiana Federation of Dentists*, 476 U.S. 447, 460 (1986) ("the purpose of the inquiries into market definition and market power is to determine whether an arrangement has the potential for genuine adverse effects on competition"). When the evidence at trial clearly proves actual forcing, and that forcing clearly forecloses a competitor from an identifiable segment of the tied market, there can be no doubt that the seller had sufficient economic power to make forcing "likely." See *Jefferson Parish*, 466 U.S. at 14; *Indiana Dentists*, 476 U.S. at 460-461 (proof of "actual detrimental effects" make "elaborate market analysis" unnecessary).

In this case there was no need to infer that Prime had economic power in the software support market sufficient to force customers to accept hardware maintenance along with software support. "It is clearly reasonable to infer that [Prime] has market power to raise prices and drive out competition in the aftermarkets, since [Virtual] offer[ed] direct evidence that [Prime] did so." *Kodak*, 112 S. Ct. at 2088. Virtual proved through direct customer testimony (C.A. App. 1427-1437), as well as written customer contact reports (C.A. App. 1058-1271, 1342-1359, 1529), that Prime forced buyers to purchase hardware maintenance. Many Prime customers were eager to take advantage of the lower price and perceived higher quality of Virtual's maintenance service. C.A. App. 1341-1359, 1529. "[A] large number of customers * * * indicated that they would like to hire Virtual as their maintenance company but concluded that because of the

tie, they were not able to." C.A. App. 1524. Prime responded to that demand by flaunting its ability to impose dramatic price increases for software support on customers who hired another provider of hardware maintenance. See *id.* at 711-712 (Prime letter responding to inquiry by Magna International regarding cancellation of hardware maintenance contract with Prime). Prime's enforcement of its tie prevented suppliers from contracting for Virtual's services. Prime had *and exercised* "the power 'to force a purchaser to do something that he would not do in a competitive market,'" *Kodak*, 112 S. Ct. at 2080 (quoting *Jefferson Parish*, 466 U.S. at 14). Prime thus foreclosed a multimillion-dollar portion of the hardware maintenance market.

The Sixth Circuit exalted market share, a mere proxy for economic power, over concrete evidence proving that power. It thus placed "formalis[m]" above "actual market realities." *Kodak*, 112 S. Ct. at 2082. It compounded its error by focusing on the market for initial software purchases rather than the distinct market for software support. For these reasons, the judgment should be vacated and the case remanded for a proper and thorough analysis that encompasses more than market-share statistics.

III. THE COURT OF APPEALS ANNOUNCED A PLAINLY ERRONEOUS STANDARD FOR THE REVIEW OF A GENERAL JURY VERDICT

The court of appeals did more than take away Virtual's jury verdict based on fallacious antitrust reasoning. It actually directed the entry of judgment for Prime. App., *infra*, 24a. Only if the Sixth Circuit had correctly rejected *every* one of Virtual's theories could that appellate judgment stand—which, of course, it cannot after *Kodak*. The court of appeals also considered, and might consider again on remand, the possibility that some but not all of Virtual's theories would be sustained. The court indicated how it would dispose of the case in that situation, and in so doing erred.

After rejecting the per se theory based on the general CAD/CAM market because of its belief that an 11% market share negated the proof of Prime's ability to force unwanted maintenance service on its software support customers, the court of appeals announced that it would "[o]rdinarily * * * remand this case for a new trial" based on that perceived failure of proof alone. App., *infra*, 14a. The proper course—contrary to the statement of the court of appeals—would be to affirm the jury's general verdict unless there was *legal* error in the jury instructions.

Under *Griffin* v. *United States*, 112 S. Ct. 466 (1991), a general verdict of conviction in a criminal case is valid even if one of the theories submitted to the jury is later found to be unsupported by the evidence. The evidentiary failure of one theory among many submitted to the jury will not invalidate a general verdict so long as (1) all of the theories are legally sound, and (2) at least one of the submitted theories is sufficiently supported in fact. In *Griffin* this Court explicitly distinguished legal error, which "means a mistake about the law," from "a mistake concerning the weight or the factual import of the evidence" where the jury has been "properly instructed as to the law." *Id.* at 474. "When * * * jurors have been left the option of relying upon a legally inadequate theory, there is no reason to think that their own intelligence and expertise will save them from that error. Quite the opposite is true, however, when they have been left the option of relying upon a factually inadequate theory, since jurors *are* well equipped to analyze the evidence." *Ibid.*

The *Griffin* rule comports with this Court's cases in the civil area, and antitrust cases in particular. This Court has previously held in a civil antitrust case that a general verdict is invalid if one of the theories is *legally* defective. *Sunkist Growers, Inc.* v. *Winckler & Smith Citrus Products*, 370 U.S. 19, 29-30 (1962) (statutory immunity shielded defendants from liability on one theory). As

Griffin demonstrates, the *Sunkist* rule cannot be casually applied when the invalidated theory depends on *factual* error. Jurors' abilities to protect themselves against factual but not legal error do not depend on whether the case before them is civil or criminal. Thus, the line drawn in *Griffin* between legal and factual insufficiency makes equally "good sense" (112 S. Ct. at 474) in the civil context.[11]

The courts of appeals have readily applied *Griffin* in the civil context. In *Composite Marine Propellers, Inc.* v. *Van Der Woude*, 962 F.2d 1263, 1992 WL 89083, at *2 (7th Cir. May 4, 1992), Judge Easterbrook and two of his colleagues, citing *Griffin*, wrote: "The district judge submitted to the jury eight possible trade secrets that the defendants might have appropriated. The jury returned a general verdict, so if the evidence supports any one of them, the verdict must be sustained." In *Walther* v. *Lone Star Gas Co.*, 952 F.2d 119, 126 (5th Cir. 1992), Judge Higginbotham, for the court, discussed *Griffin* and wrote: "we will not reverse a verdict simply because the jury might have decided on a ground that was supported by insufficient evidence."[12]

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[11] Eighty-five years ago, this Court did once reverse a general verdict because insufficient evidence supported some counts of a multiple-count civil complaint. *Wilmington Star Mining Co.* v. *Fulton*, 205 U.S. 60, 77-79 (1907). The decision in that diversity case appears to rest on Illinois law, however, and the Court has never once cited the relevant holding of the case as authority since then.

[12] If anything, a general verdict should be more difficult to overturn in a civil than in a criminal case. This Court consistently manifests a special concern to prevent erroneous verdicts in criminal cases because of the vital liberty interests at stake. See, *e.g.*, *Jackson v. Virginia*, 443 U.S. 307, 315 (1979) (higher standard of proof in criminal cases "symbolizes the significance that our society attaches to the criminal sanction and thus to liberty itself"); *Addington* v. *Texas*, 441 U.S. 418, 423 (1979) (contrasting society's "minimal concern with the outcome of * * * private suits" with

Accordingly, if at least one of Virtual's theories of liability survives both legal and factual review in this Court or on remand, no new trial should be ordered solely because an alternative theory fails for want of sufficient evidence of market power. The Sixth Circuit stated that, although the general CAD/CAM market definition was legally adequate as presented to the jury, the evidence of market share was insufficient to support a finding of market power; without explanation, the court of appeals then mischaracterized that supposed shortcoming as an error of law. App., *infra*, 12a-13a. In *Kodak* this Court reemphasized that determinations of market power are peculiar to the facts of each case; declining to craft a new legal presumption, this Court instead left the resolution of the market power issue to the jury. 112 S. Ct. at 2082. Certainly the issue of market power, when presented to a properly instructed jury, is in general a question of fact. *E.g.*, *Oahu Gas Service, Inc.* v. *Pacific Resources, Inc.*, 838 F.2d 360, 363 (9th Cir.), cert denied, 488 U.S. 870 (1988); *Broadway Delivery Corp.* v. *United Parcel Service*, 651 F.2d 122, 129 (2d Cir.), cert. denied, 454 US. 968 (1981).[13]

The Sixth Circuit reached a result irreconcilable with *Kodak* as a matter of antitrust law, and for that reason alone its judgment should not stand. Because the Sixth Circuit also committed another, independent error, and because its standard of review for general jury verdicts conflicts with decisions of this Court and other circuits,

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necessity to "exclude as nearly as possible the likelihood of an erroneous judgment" in a criminal case). The minimal societal "concern with the outcome" of a private action makes the systemic costs associated with a new trial especially acute in this case, which consumed five weeks of court and jury time.

[13] Similarly, assuming correct instructions, the question whether a particular tie-in or other practice illegally restrains competition under the rule of reason is a matter for the factfinder. *Arizona* v. *Maricopa County Medical Soc'y*, 457 U.S. 332, 343 (1982).

the Court should include the standard-of-review issue within its grant of certiorari and either remand the case summarily or set it for briefing and argument.

CONCLUSION

The petition for a writ of certiorari should be granted, the judgment below should be vacated, and the case should be remanded for further consideration in light of *Kodak* and *Griffin*. In the alternative, the petition for a writ of certiorari should be granted, and the case should be set for full briefing and argument.

Respectfully submitted.

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JULY 1992

APPENDICES

APPENDIX A

UNITED STATES COURT OF APPEALS
SIXTH CIRCUIT

Nos. 90-2249, 91-1273

VIRTUAL MAINTENANCE, INC., PLAINTIFF-APPELLEE

v.

PRIME COMPUTER, INC., DEFENDANT-APPELLANT

Argued Aug. 9, 1991

Decided Feb. 27, 1992

Ronald S. Katz, Janet S. Arnold, Coudert Bros., San Francisco, Cal., Rodger D. Young, argued, Jamal J. Hamood, Young & Hamood, Southfield, Mich., for plaintiff-appellee.

Stephen F. Wasinger, Howard B. Iwrey, Honigman, Miller, Schwartz & Cohn, Detroit, Mich., Charles Fried, argued, Cambridge, Mass., Deborah J. Hart, briefed, James C. Burling, briefed, Hale and Dorr, Boston, Mass., for defendant-appellant.

Before JONES and SUHRHEINRICH, Circuit Judges, and LIVELY, Senior Circuit Judge.

SUHRHEINRICH, Circuit Judge.

Defendant Prime Computer, Inc. ("Prime") appeals the district court's denial of its motion for judg-

ment notwithstanding the verdict ("j.n.o.v.") or a new trial following a jury's general verdict in favor of plaintiff Virtual Maintenance, Inc. ("Virtual") in this antitrust action. The jury found that Prime's sale of certain computer software support services in conjunction with computer hardware maintenance for Prime's 50 Series minicomputers amounted to an illegal tying arrangement in violation of section 1 of the Sherman Act, 15 U.S.C. § 1. The jury awarded Virtual $8,453,000 in compensatory damages, which the district court trebled under the antitrust statute for a total award of $25,359,000. The district court then issued an injunction prohibiting Prime from enforcing a contract provision requiring the purchase of Prime's hardware maintenance with its software support services and declaring void any Prime hardware maintenance contracts with customers using "Ford-required CAD/CAM applications."

Prime's appeal challenges the three alternative legal theories presented to the jury, the scope of damages awarded, and the specificity of the injunction. We conclude that Prime lacks market power in a properly defined interbrand tying product market. We further find that Prime's conduct did not have substantial anticompetitive effects in the tied product. Therefore, the district court erred by not granting Prime's motion for j.n.o.v. Because judgment should have been entered for Prime, the award of damages and the injunction must be vacated. We REVERSE, VACATE, and REMAND with instructions to enter judgment in favor of Prime.

I

Prime manufactures and markets computer systems, distributes software, and provides hardware

maintenance services for those systems. One of Prime's hardware systems is the Prime 50 Series minicomputer. In the general market for computers and software, Prime competes with companies such as IBM, UNISYS, NCR, DEC, Hewlett-Packard, and Data General. All large companies that sell computers and software provide hardware maintenance for their own computers.

Part of Prime's business is to supply companies with Computer Aided Design/Computer Aided Manufacturing Systems ("CAD/CAM") used in product design. Prime also distributes software for the CAD/CAM systems and accounts for approximately 11% of the general CAD/CAM software sold throughout the world, making it the second largest vendor of CAD/CAM in the world.

One software design program distributed by Prime, called PDGS, was created by Ford Motor Company ("Ford"). A general version of PDGS is widely available from other distributors. Ford licenses Prime as the exclusive distributor of a modified version of PDGS used in automotive design under a year-to-year contract. Ford frequently updates PDGS and requires all companies that provide it with design services to use the most current version of PDGS in order to facilitate translation of the designs into Ford's identical PDGS software.

Although Ford's version of PDGS runs only on Prime's 50 Series minicomputers, it can be translated to other systems at a higher cost. The Prime 50 Series computer is in use in approximately 23,000 systems worldwide. Software compatible with the 50 Series accounts for approximately 3% of the worldwide CAD/CAM market, and Ford's PDGS

software accounts for an even smaller percentage of the total CAD/CAM market. Approximately 350-400 of the 23,000 Prime 50 Series computers, or about 2%, are capable of using PDGS.

In addition to distributing Ford's PDGS software, Prime distributes revisions, modifications, updates, and support services (collectively "software support") for general CAD/CAM software. Prime also distributes software support for PDGS software, offering it to Ford's design suppliers as part of a package that includes hardware maintenance on the 50 Series minicomputers. The cost of the package is $16,000 per year for each installation. Customers are free to buy the software support separately from the hardware maintenance, but the cost to purchase software support without the maintenance package varies from $80,000 to $160,000 per year for each installation.

Virtual services computer systems and provides hardware maintenance for various companies. When Virtual entered the market for hardware maintenance of Prime 50 Series computers in April 1989, it discovered Prime's practice of packaging its software support with hardware maintenance of 50 Series computers. Virtual tried unsuccessfully to enter into hardware maintenance contracts with companies that owned Prime 50 Series computers. Although some purchasers of Prime's software support desired to use Virtual's hardware maintenance, the design companies in need of the continuous software support were reluctant to switch to Virtual's hardware maintenance because of the increased price Prime charged for the purchase of software support apart from its hardware maintenance package. It is unclear how many Prime 50 Series owners do design work for

Ford or how many of these owners desired to switch to Virtual for hardware maintenance. It is undisputed, however, that this number could not exceed 400 because that is the total number of 50 Series systems capable of using PDGS.

The hardware maintenance provision was included in all of Prime's CAD/CAM software support contracts. However, the general contract to purchase PDGS contained no hardware maintenance requirement. Only the frequent software updates were linked to hardware maintenance, not the initial purchase of PDGS design software. However, as noted, Prime's software support could be purchased separately only at a prohibitive cost increase over the combined software support/maintenance package.

Virtual sued Prime, claiming that Prime's marketing strategy of linking its software support with hardware maintenance on 50 Series computers amounted to an illegal tying arrangement in violation of the antitrust laws. Virtual alleged that purchase of software support for general CAD/CAM and/or Ford-required CAD/CAM software (the tying product) was conditioned on the purchase of hardware maintenance for Prime 50 Series computers (the tied product). Virtual claimed that this tie-in unlawfully restricted its ability to compete with Prime in the 50 Series hardware maintenance market.

Prior to trial, Prime moved for summary judgment claiming that there was no genuine issue of material fact regarding whether it had sufficient economic power in the market for the tying product to restrain competition appreciably in the tied product market. The district court determined that genuine issues of material fact were present as to the defini-

tion of the relevant product market and denied Prime's motion for summary judgment. 735 F.Supp. 231 (E.D.Mich.1990). At trial, the jury found in favor of Virtual.

The district court denied Prime's motion for j.n.o.v. or a new trial and issued an injunction prohibiting Prime from continuing its practice of selling software support with hardware maintenance. This court denied Prime's motion to stay the injunction pending appeal.

II

Section 1 of the Sherman Act prohibits "[e]very contract, combination . . . or conspiracy, in restraint of trade or commerce." 15 U.S.C. § 1. The Supreme Court has consistently held that this provision only proscribes unreasonable restraints of trade. *See Business Elec. Corp. v. Sharp Elec. Corp.*, 485 U.S. 717, 108 S.Ct. 1515, 99 L.Ed.2d 808 (1988). Tying arrangements have long been considered unreasonable restraints of trade. *See International Salt Co. v. United States*, 332 U.S. 392, 68 S.Ct. 12, 92 L.Ed. 20 (1947); *Fortner Enters., Inc. v. United States Steel Corp.*, 394 U.S. 495, 89 S.Ct. 1252, 22 L.Ed.2d 495 (1969) (*Fortner I*).

A tying arrangement is "an agreement by a party to sell one product but only on the condition that the buyer also purchase a different (or tied) product." *Northern Pacific Ry. Co. v. United States*, 356 U.S. 1, 5, 78 S.Ct. 514, 518, 2 L.Ed.2d 545 (1958). Not all sales of two products together constitute an illegal tying arrangement. *Jefferson Parish Hosp. Dist., No. 2 v. Hyde*, 466 U.S. 2, 104 S.Ct. 1551, 1558, 80 L.Ed. 2d 2 (1984). The packaging of two items together violates the antitrust laws only when a seller has

sufficient market power over the tying product such that it can force buyers to purchase the tied product. *Id.* at 12, 104 S.Ct. at 1558.

A plaintiff can establish an illegal tying arrangement under either a per se standard or a rule of reason standard. To establish a per se violation: "1) There must be a tying arrangement between two distinct products or services; 2) The seller must have sufficient economic power in the tying market to restrain appreciably competition in the tied product market; and 3) The amount of commerce affected must be 'not insubstantial.'" *Directory Sales Management v. Ohio Bell Tel. Co.*, 833 F.2d 606, 609 (6th Cir.1987) (quoting *Bouldis v. United States Suzuki Motor Corp.*, 711 F.2d 1319, 1330 (6th Cir.1983)). Even if a per se violation is established, a defendant may prevail by showing a substantial business justification for the tie-in. *See, e.g., Mozart Co. v. Mercedes-Benz of North America, Inc.*, 833 F.2d 1342, 1348-51 (9th Cir.1987), *cert. denied*, 488 U.S. 870, 109 S.Ct. 179, 102 L.Ed.2d 148 (1988).

A.

A tying arrangement clearly exists here because the large price differential between software support alone and the software support/hardware maintenance package induces all rational buyers of Prime's software support to accept its hardware maintenance. It is also clear that two separate products or services, software support and hardware maintenance, are involved in this case due to the evidence of separate consumer demand for each product. *See Jefferson Parish*, 466 U.S. at 19, 104 S.Ct. at 1561 (separate consumer demand for products is the key to determining if separate products are involved). We there-

fore turn to the issue of Prime's economic power in the tying product market.

B.

The second element of a per se tying case is proof of sufficient economic power in the tying market to affect appreciably the competition in the tied market. Such economic power exists when the tying party enjoys some significant advantage in the tying product market, not enjoyed by its competitors, that enables it to condition the availability of the tying item on acceptance of the tied item. *Jefferson Parish*, 466 U.S. at 14, 104 S.Ct. at 1559; *United States Steel Corp. v. Fortner Enters., Inc.*, 429 U.S. 610, 619-20, 97 S.Ct. 861, 867, 51 L.Ed.2d 80 (1977) (*Fortner II*); *Northern Pacific*, 356 U.S. at 6, 78 S.Ct. at 518. If this market power over consumers is not present, then purchasers of the tying product can simply turn to other sources of supply, and the attempted tie will ultimately collapse for want of takers.

The market power inquiry has both a product and a geographic dimension. "Because the relevant market provides the framework against which economic power can be measured, defining the product and geographic markets is a threshold requirement." *Spectrofuge Corp. v. Beckman Instruments, Inc.*, 575 F.2d 256, 276 (5th Cir.1978), *cert. denied*, 440 U.S. 939, 99 S.Ct. 1289, 59 L.Ed.2d 499 (1979). The parties agree that the relevant geographic market is the entire world. Virtual submits, however, that we need not determine the relevant product market because Prime's market power is established by evidence that Prime was able to force an appreciable number of customers to submit to the tie. Virtual claims that "when 'forcing' is present . . . the Sher-

man Act is violated." *Jefferson Parish*, 466 U.S. at 12, 104 S.Ct. at 1558.

Virtual is mistaken. Proof that a defendant forced a consumer to accept a tying arrangement is not alone adequate to establish an illegal tie. Rather, "forcing" is simply a proxy for determining whether the seller has conditioned the tying product on acceptance of the tied product. Evidence of "forcing" is necessary to show that a tie exists between two products, but is not sufficient to establish that the tie is illegal. Proof of such conduct does not establish per se illegality because not all ties are illegal. *Jefferson Parish*, 466 U.S. at 11-12, 104 S.Ct. at 1558. As one court explained this distinction:

> Application of the "forcing" concept confronts courts with a dilemma. Obviously a seller must have some degree of leverage or power to require buyers to accept the conditions of having to purchase the tied products: if buyers always purchased the product voluntarily, the condition would be unnecessary. But if that leverage or power alone suffices to establish the presence of forcing and thus to invoke the per se rule, then every tying agreement would ipso facto be illegal per se. Such a result is clearly not what [*Jefferson Parish v.*] *Hyde* or earlier Supreme Court decisions intended.

Casey v. Diet Center, Inc., 590 F.Supp. 1561, 1567 n. 9 (N.D.Cal.1984).

Indeed, if proof of forcing alone were sufficient to establish an illegal tie, the Supreme Court's market analysis in *Jefferson Parish* would have been superfluous. *Jefferson Parish* involved a hospital that had contracted with a certain firm to provide all of its

anesthesiological services. The hospital's patients were "forced" to purchase that firm's anesthesiological services (the tied product) whenever they purchased hospital care (the tying product). Nevertheless, the Court found that the arrangement did not violate the Sherman Act. The Court indicated that the hospital had to possess market power over the tying product to be liable under a per se tying claim. *Jefferson Parish*, 466 U.S. at 25, 104 S.Ct. at 1565. Similarly, Virtual must show that Prime is able to force customers to buy its software support plus hardware maintenance *because of its market power* over the tying product. Thus evidence of "forcing" without market power over the tying product does not establish an antitrust violation.

To determine whether Prime has market power over the tying product, it is essential first to define the tying product market. The district court's definition of the relevant tying product market in its jury instructions involves the articulation of a legal standard which is then applied by the jury to the factual circumstances of each case. "Accordingly, the district court's formulation of the market tests may be freely reviewed on appeal as a matter of law; the conclusion that the relevant markets [consist of certain products] sold within specific [geographic areas] is a finding of fact subject to the clearly erroneous rule." *White & White, Inc. v. American Hosp. Supply Corp.*, 723 F.2d 495, 499-500 (6th Cir.1983). *See also Jayco Systems, Inc. v. Savin Business Machs. Corp.*, 777 F.2d 306, 319 n. 43 (5th Cir.1985), *cert. denied*, 479 U.S. 816, 107 S.Ct. 73, 93 L.Ed.2d 30 (1986); *Will v. Comprehensive Accounting Corp.*, 776 F.2d 665, 673 n. 4 (7th Cir.1985), *cert. denied*, 475 U.S. 1129, 106 S.Ct. 1659, 90 L.Ed.2d 201 (1986); *Seidenstein v. National Medical Enters., Inc.*, 769

F.2d 1100, 1106 (5th Cir.1985); *Systemized of New England, Inc. v. SCM, Inc.*, 732 F.2d 1030, 1035 (1st Cir.1984).

A market is "any grouping of sales whose sellers, if unified by a hypothetical cartel or merger, could raise prices significantly above the competitive level." *H.J., Inc. v. International Tel. & Tel. Corp.*, 867 F.2d 1531, 1537 (8th Cir.1989) (quoting Philip E. Areeda & Herbert Hovenkamp, *Antitrust Law*, ¶ 518.1 at 311 (Supp.1987)). In *A.I. Root v. Computer/Dynamics, Inc.*, 806 F.2d 673 (6th Cir.1986), this court stated:

> The essential test for ascertaining the relevant product market involves the identification of those products or services that are either (1) identical to or (2) available substitutes for the defendant's product or service. . . . This comparative analysis has been characterized as the "reasonable interchangeability" standard.

Id. at 675 (quoting *White & White*, 723 F.2d at 500). *See also Brown Shoe Co. v. United States*, 370 U.S. 294, 325, 82 S.Ct. 1502, 1523, 8 L.Ed.2d 510 (1962). The "reasonable interchangeability" standard focuses on "cross-elasticity of demand—the degree that buyers of one product switch to another in response to a price change." *H.J., Inc.*, 867 F.2d at 1538. Cross-elasticity of supply also helps define a relevant product market. Cross-elasticity of supply is the degree to which producers will enter the market to compete if prices rise. *Brown Shoe*, 370 U.S. at 325 n. 42, 82 S.Ct. at 1524 n. 42. With these principles of product market definition in mind, we turn to the district court's formulation of the relevant markets in its jury instructions.

1.

The district court presented the jury with two alternative definitions of the tying product market under the per se theory. The court defined these markets as: (1) "the sale of software revisions and support for the CAD/CAM industry in general," or (2) "the sale of software revisions and support for software necessary to do business with Ford Motor Company." (Joint App. at 1972). We consider each of these product market definitions in turn.

We find no error in the legal adequacy of the district court's first market definition. However, this market definition required the jury to find that Prime possessed power over price or "market power" in the sale of all software suitable for CAD/CAM purposes. Viewing the evidence in the light most favorable to Virtual, Prime possessed at most an 11% share of this market. This market share is insufficient to confer market power. *See Jefferson Parish*, 466 U.S. at 26, 104 S.Ct. at 1565 (30% market share insufficient to infer market power); *A.I. Root*, 806 F.2d at 675 (2-4% market share insufficient); *Grappone, Inc. v. Subaru of New England, Inc.*, 858 F.2d 792, 796 (1st Cir.1988) (5% market share insufcient). An 11% market share, standing alone, is insufficient as a matter of law to confer the "great market power, evidenced by an exceptional demand for the tying product" necessary for a per se illegal tie. *A.I. Root*, 806 F.2d at 676.

Relying on *Fortner I*, 394 U.S. at 503-04, 89 S.Ct. at 1258-59, Virtual urges that proof of power over "some appreciable number of consumers" in a market can establish market power throughout that market. This argument was rejected by the Supreme Court in *Fortner II*, 429 U.S. at 620 n. 13, 97 S.Ct. at 868

n. 13 (the inclusion of tie-in clauses with some appreciable number of buyers cannot establish market power in the absence of power to control prices throughout the market). *See also 3 P.M., Inc. v. Basic Four Corp.*, 591 F.Supp. 1350, 1360-61 (E.D. Mich.1984). Even if we accepted this argument, Prime can only control customers who desire PDGS software and PDGS accounts for less than 3% of the general CAD/CAM market. Moreover, the fact that some of Prime's customers prefer PDGS does not enable Prime to influence competitive conditions in the general CAD/CAM market because

> virtually every seller of a branded product has *some* customers who especially prefer its product. . . . But to permit that fact alone to show market power is to condemn ties that are bound to be harmless. . . . *Jefferson Parish* convinces us that the entire court means the "market power" requirement to be serious enough to screen out this class of harmless tie.

Grappone, 858 F.2d at 797.

Therefore, a per se tying violation could not be established under the district court's first jury instruction because Prime lacks market power in the general CAD/CAM product market. Because the jury returned a general verdict when one of the theories of liability was legally incorrect, we must reverse. *See Maryland v. Baldwin*, 112 U.S. 490, 493, 5 S.Ct. 278, 279, 28 L.Ed. 822 (1884); *Wilmington Star Mining Co. v. Fulton*, 205 U.S. 60, 79, 27 S.Ct. 412, 419, 51 L.Ed. 708 (1907); *United New York and New Jersey Sandy Hook Pilots Association v. Halecki*, 358 U.S. 613, 619, 79 S.Ct. 517, 520, 3 L.Ed.2d 541 (1959); *Sunkist Growers, Inc. v. Winckler & Smith Citrus*

Products Co., 370 U.S. 19, 29-30, 82 S.Ct. 1130, 1135-36, 8 L.Ed.2d 305 (1962).

Ordinarily, we would remand this case for a new trial. *Cf. Arthur S. Langenderfer, Inc. v. S.E. Johnson Co.*, 729 F.2d 1050 (6th Cir.), *cert. denied*, 469 U.S. 1036, 105 S.Ct. 510, 83 L.Ed.2d 401 (1984). However, a new trial is unnecessary here because the evidence presented is insufficient to establish an antitrust violation by Prime in any conceivable product market. We therefore turn to the district court's second proffered tying product market instruction.

2.

Prime contends that the second market instruction defined the tying product market too narrowly as a matter of law. Prime claims that the market definition of "Ford-required CAD/CAM" must fail because this market is limited to PDGS, a single manufacturer's brand of software. We agree.

"The antitrust laws were enacted for the protection of *competition*, not *competitors*." *Atlantic Richfield Co. v. U.S.A. Petroleum Co.*, 495 U.S. 328, ——, 110 S.Ct. 1884, 1891, 109 L.Ed.2d 333, 346 (1990) (quoting *Brown Shoe*, 370 U.S. at 320, 82 S.Ct. at 1521). Consequently, "interbrand competition among manufacturers of the same generic product . . . is the primary concern of antitrust law." *Continental T.V., Inc. v. G.T.E. Sylvania, Inc.*, 433 U.S. 36, 52 n. 19, 97 S.Ct. 2549, 2558 n. 19, 53 L.Ed.2d 568 (1977); *accord Business Electronics*, 485 U.S. at 724-25, 108 S.Ct. at 1519-20; *Crane & Shovel Sales Corp. v. Bucyrus-Erie Co.*, 854 F.2d 802, 809-10 (6th Cir. 1988). Courts therefore consistently reject market definitions limited to a single manufacturer's products

because such markets do not reflect interbrand competition. *See, e.g., International Logistics Group, Ltd. v. Chrysler Corp.*, 884 F.2d 904, 908 (6th Cir.1989), *cert. denied*, 494 U.S. 1066, 110 S.Ct. 1783, 108 L.Ed.2d 784 (1990); *H.J., Inc.*, 867 F.2d at 1538; *Grappone*, 858 F.2d at 797; *Neumann v. Reinforced Earth Co.*, 786 F.2d 424, 428-30 (D.C.Cir.), *cert. denied*, 479 U.S. 851, 107 S.Ct. 181, 93 L.Ed.2d 116 (1986); *Domed Stadium Hotel, Inc. v. Holiday Inns, Inc.*, 732 F.2d 480, 488-89 (5th Cir.1984); *Telex Corp. v. IBM Corp.*, 510 F.2d 894, 917 (10th Cir.), *cert. dismissed*, 423 U.S. 802, 96 S.Ct. 8, 46 L.Ed.2d 244 (1979).

Virtual attempts to avoid this authority by claiming that Ford's preference for Prime's software can define the relevant market. Virtual claims that "Ford-required CAD/CAM" is not a single brand market because Ford requires four brands of CAD/CAM software: Primos, Primenet, CADDS and PDGS. While Prime manufactures three of these products, Ford makes one itself. Therefore, Virtual submits that defining the market by Ford's requirements does not create a single brand market because Ford requires more than one brand.

Even giving Virtual every inference, we conclude that a market defined by three Prime products and one Ford product is unduly narrow. The flaw in such a market definition is that it is based solely on one customer's requirements. This court has held that a single customer's ultimate preference for a particular manufacturer's brand does not create a separate product market. *International Logistics*, 884 F.2d at 804; *Dunn & Mavis, Inc. v. NU-Car Driveway, Inc.*, 691 F.2d 241 (6th Cir.1982). Other courts are in accord. *See Neumann*, 786 F.2d at 429; *Jayco*, 777

F.2d at 320; *Domed Stadium*, 732 F.2d at 489; *General Business Systems v. North American Philips Corp.*, 699 F.2d 965, 975 (9th Cir.1983).

Virtual seeks to distinguish these cases by pointing out that Ford is not the only customer of Prime's products; rather, all of Ford's design suppliers make up the customer market for "Ford-required CAD/CAM." This ignores the fact that Ford requires its suppliers to purchase the software updates for Ford's benefit. Ford is ultimately the single consumer of its specialized design software because Ford's requirements define the demand for the software and the updates. But defining the market by Ford's requirement creates the appearance of market power based only upon the demand side of the market. Defining a market, or "submarket," on the basis of demand considerations alone is erroneous because such an approach fails to consider the supply side of the market. Philip E. Areeda & Herbert Hovenkamp, *Antitrust Law*, ¶ 518.1g at 471 & n.26 (Supp.1990) (citing *United States v. Central State Bank*, 817 F.2d 22 (6th Cir.1987)). The relevant product market cannot be determined without considering the cross-elasticity of supply.

Virtual contends that Prime has no supply side competition because it has an exclusive license for PDGS and thus only Prime can market the software updates for PDGS. This argument confuses the tying product (software support for PDGS) with the interbrand market relevant for antitrust analysis. This court previously has refused to ignore interbrand competition by limiting the product market to one manufacturer's product. *See A.I. Root*, 806 F.2d at 675-76; *Kingsport Motors, Inc. v. Chrysler Motors*

Corp., 644 F.2d 566 (6th Cir.1981). As we stated in *Kingsport:*

> We believe that properly analyzed, the tying products in this case are the medium price Dodge automobiles sold by Chrysler, but that the market to be considered in relation to this tying product is the sum total of medium priced automobiles manufactured by Chrysler and all other automobile manufacturers and sold in the United States.

Id. at 571. In the present case, the relevant tying product market is comprised of all CAD/CAM software reasonably interchangeable with PDGS.

Virtual claims that PDGS constitutes a relevant "submarket" because of evidence that Prime was able to raise prices in this "submarket." Evidence of short-term price increases in an intrabrand "submarket" does not defeat the theory of supply substitution. The Ninth Circuit rejected such an argument in *General Business Systems*, 699 F.2d at 974-77. In that case, the court held that a computer manufacturer could not sustain high prices in the derivative markets for computer service and warranty protection because it lacked market power in the primary interbrand market for small business computers. *Id.* at 977. The same rationale was applied by this court in *A.I. Root*, 806 F.2d at 675-76, where we found that "competitors of [defendant] could produce computer hardware and software equivalent to that manufactured by [defendant]. Accordingly, [defendant's product] did not compose a separate and distinct submarket within the computer industry as to which we should measure 'market share.' "

The same is true in this case. Prime has market power in the trivial sense that no one else makes PDGS. But true market power—power sufficient to charge and sustain anticompetitive prices—cannot be inferred from this because were Prime to charge exorbitant prices for its software support, its customers would simply switch to some other manufacturer of PDGS-type software. Prime's lack of market power over the general market for CAD/CAM software thus prevents Prime from controlling the "submarket" for PDGS software. *See Brown Shoe*, 370 U.S. at 325, 82 S.Ct. at 1523; *A.I. Root*, 806 F.2d at 676; *General Business Systems*, 699 F.2d at 977.

Virtual responds that Ford and its design suppliers cannot switch to a new supplier of software support because they are "locked-in" to Prime as the sole supplier due to their substantial investments in Prime 50 Series computers and other hardware. While Ford might believe it is "locked-in," this is due in large part to its own decision to purchase Prime's software and invest in Prime's computer systems. But a customer's initial purchase of a particular manufacturer's product does not justify a limited market definition. Defining the market by customer demand *after* the customer has chosen a single supplier fails to take into account that the supplier (here Prime) must compete with other similar suppliers to be designated the sole source in the first place. *Neumann*, 786 F.2d at 429. As noted in Philip E. Areeda, *Antitrust Law*, ¶ 1709c5 at 102 (1991):

> Notwithstanding some element of truth in the "lock in" contention, it misconceives the purpose of the legal inquiry into power. In the tying context, we want to know whether power in the tying-product market forced the [plaintiff] to

> agree to take the unwanted second product. It follows that we should measure the tying seller's power at the time that the tie-in agreement came into existence. At that time, the [plaintiff] has not yet invested the capital or effort that later makes him reluctant to abandon [defendant's product]. Indeed, at that time, the plaintiff presumably had many market alternatives.

Given the intense competition in the general market for computers and software, Ford presumably had many companies to choose from prior to purchasing Prime's equipment.

Numerous cases have rejected the "lock-in" theory as a viable basis for antitrust liability when there is a potential for a reasonable interchangeability of supply. *See, e.g., General Business Systems,* 699 F.2d at 974 n. 2 ("Whether real or only potential, reasonable interchangeability of supply is significant because the existence of possible competitors constrains prices even when there is no direct competition."); *Cal. Computer Products, Inc. v. IBM Corp.,* 613 F.2d 727, 739-43 (9th Cir.1979); *Telex,* 510 F.2d at 919. It is undisputed that IBM, Data General and other competitors of Prime have contacted Ford about supplying PDGS software and updates for Ford and Ford's designers. Ford itself has tried to make PDGS compatible with hardware other than the Prime 50 Series. There exists at least a potential for a reasonable interchangeability of supply.

Even if we accepted Virtual's lock-in argument, it seems unlikely that a large consumer like Ford would be "locked-in" by Prime when Ford controls the license to PDGS. The lock-in theory is viable only when the producer can charge its customer monopoly

prices without fear of being replaced by competitors due to the customer's substantial investments. Ford's control of the product it is allegedly being forced to buy precludes Prime from maintaining the market share necessary to charge monopoly prices. Market power cannot be sustained absent the ability to maintain market share. *United States v. Syufy Enterprises, Inc.*, 903 F.2d 659, 665-66 (9th Cir.1990) ("It is not market share that counts, but the ability to maintain market share.").

Virtual next argues that Prime's market power was established by the "uniqueness" of the PDGS software. The Supreme Court has held that the uniqueness of a product can establish market power in tying cases. *Fortner II*, 429 U.S. at 612, 97 S.Ct. at 863. However, the Court held as a matter of law that mere factual uniqueness was not enough. In order to establish market power by showing a unique package, a plaintiff must prove that "the seller has some advantage not shared by his competitors in the market for the tying product." *Id.* at 620, 97 S.Ct. at 867. "In other words, the plaintiff must show a barrier to entry that prevents competition. If rivals may design and offer a similar package for a similar cost, there is no barrier, and without a barrier there is no market power." *Will*, 776 F.2d at 672. "Uniqueness means the *inability* of a seller's rivals to offer similar packages, not simply the fact that no rival has chosen to do so." *Spartan Grain & Mill Co. v. Ayers*, 735 F.2d 1284, 1287 (11th Cir.1984), *cert. denied*, 469 U.S. 1109, 105 S.Ct. 785, 83 L.Ed.2d 779 (1985).

Virtual contends that substantial entry barriers prevent competitors from entering the market for "Ford-required CAD/CAM." The barriers are

mainly high entry costs, high investment costs in equipment to produce the software, and Ford's exclusive license with Prime. However, there was substantial evidence that large companies such as IBM, DEC, and Data General already possess the production capacity and facilities to develop software for Ford within one year. All competitors are interested in having a large customer such as Ford and thus market power is not created by the year-to-year exclusive licensing of PDGS. The notion that Prime can charge anticompetitive prices rests on the suspect assumption that Ford is willing to pay greatly increased costs to its design suppliers, who will pass any price increase in software on to Ford. Even giving Virtual every inference, a jury verdict in an antitrust case that ignores economic reality cannot stand. *Matsushita Elec. Indus. Co. v. Zenith Radio Co.*, 475 U.S. 574, 587, 106 S.Ct. 1348, 1365, 89 L.Ed.2d 538 (1986).

Virtual claims that Prime's exclusive license is a significant barrier to entry into the PDGS market that enhances PDGS's uniqueness. This court has held that a copyright for BOSS software did not make equipment using such software a unique product. *A.I. Root*, 806 F.2d at 676-77. Because the presumption of market power for copyrights was based on the uniqueness of the copyrighted material, any curtailment of the presumption of market power from copyrights necessarily limits the use of the uniqueness test as a shortcut to a finding of economic power. *See Jefferson Parish*, 466 U.S. at 37 n. 7, 104 S.Ct. at 1571 n. 7 (O'Connor, J., concurring). *A.I. Root* precludes reliance on the uniqueness of a long term copyright to find market power. Therefore, a finding of uniqueness from a mere one year exclusive license is

foreclosed. *A.I. Root*, 806 F.2d at 676-77; *3 P.M., Inc.*, 591 F.Supp. at 1358-59. This is especially true when there is evidence that other barriers to entry, at least with large competitors like IBM, are low on the supply side.

We conclude that the district court erred by allowing Virtual's proposed "Ford-required CAD/CAM" market instruction to go to the jury. Such an instruction is too narrow as a matter of law because it defines the tying product market only by demand considerations. In a properly defined tying product market, Prime lacks the market power necessary to commit a per se illegal tie. We therefore next address whether substantial evidence supports a determination that Prime committed illegal tying under the rule of reason.

C.

When, as here, a seller does not possess the market power that enables it to force customers to purchase a second product as a condition to obtaining the tying product, an antitrust violation for tying can nonetheless be established by evidence that the tie is an unreasonable restraint on competition in the market for the tied product. *Jefferson Parish*, 466 U.S. at 18, 104 S.Ct. at 1561; *Hand v. Central Transport, Inc.*, 779 F.2d 8, 10-11 (6th Cir.1985) (per curiam); *Davis-Watkins Co. v. Service Merchandise*, 686 F.2d 1190, 1196 (6th Cir.1982). Under the rule of reason a plaintiff must show not only that a restraint exists but that it actually has anticompetitive effects in an interbrand market. *Crane & Shovel*, 854 F.2d at 809. Prime correctly notes that the Supreme Court would analyze this type of tying claim like "any exclusive-requirements contract." *Jefferson Parish*, 466 U.S. at 30 n. 51, 104 S.Ct. at 1568 n. 51.

Under exclusive dealing principles, foreclosure of hardware maintenance customers to Virtual by Prime's tie-in becomes unreasonable only when a significant portion of all available purchasers are foreclosed by the exclusive conduct. *Id.* at 30-31, 104 S.Ct. at 1567-68; *see generally Tampa Electric Co. v. Nashville Coal Co.*, 365 U.S. 320, 333-34, 81 S.Ct. 623, 630-31, 5 L.Ed.2d 580 (1961). Virtual did not produce evidence of a significant amount of foreclosure due to the tie-in in the tied product market for computer hardware maintenance.

Nor can Virtual limit the definition of the tied product market to hardware maintenance of Prime 50 Series computers simply because it desires to service only Prime's systems. Markets are defined by ease of supply and demand substitution, not by one competitor's business preferences. *See, e.g., Dunn & Mavis*, 691 F.2d at 243; *Spectrofuge Corp.*, 575 F.2d at 282; *Telex*, 510 F.2d at 917. Hardware maintenance of Prime's computers is similar to servicing other minicomputers. Thus companies performing hardware maintenance on the Prime 50 Series can easily switch to maintenance of other computers. The market extends beyond hardware maintenance of Prime's 50 Series because hardware maintenance skills are easily transferable. *See Spectrofuge Corp.*, 575 F.2d at 283.

Virtual claims that a jury could reasonably find that Prime possessed almost total control over the Prime 50 Series hardware maintenance market. This mistakenly assumes that the tied product market is limited to Prime's own system. The flaws of this analysis have been discussed above. The relevant tied product market is computer hardware maintenance in general.

Even assuming that Prime had market power over consumers of its own brand of sofeware, Prime's tie foreclosed competition for hardware maintenance of at most the 400 50 Series systems capable of using PDGS. *See Hand*, 779 F.2d at 11 ("A defendant must have market power [over the tying product] before its conduct can be shown to have an adverse effect on competition [in the tied product market]."). The foreclosure of 400 computer systems out of the thousands of systems in the worldwide market for computer hardware maintenance is insignificant as a matter of law. Consequently, Prime's tie-in did not have anticompetitive effects in the general hardware maintenance market. "Without a showing of actual adverse effect on competition, [Virtual] cannot make out a case under the antitrust laws, and no such showing has been made." *Jefferson Parish*, 466 U.S. at 31, 104 S.Ct. at 1568. There is insufficient evidence to support the jury verdict under the rule of reason.

III

The judgment of the trial court is reversed because it is based upon an erroneous determination of the fundamental issue of relevant product market. A j.n.o.v. is entered for Prime because the facts presented show that Prime lacks market power in the interbrand market for general CAD/CAM software. Moreover, there is no proof that Prime's conduct had a substantial anticompetitive effect in the general market for computer hardware maintenance. Therefore, the award of damages and the injunction are vacated. For the foregoing reasons, we REVERSE, VACATE, and REMAND with instructions that judgment be entered in favor of Prime.

APPENDIX B

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

Case #89 CV 71762 DT
Hon. Horace W. Gilmore

VIRTUAL MAINTENANCE, INC.,
a Michigan corporation, PLAINTIFF

vs.

PRIME COMPUTER,
a foreign corporation, DEFENDANT

ENTRY OF JUDGMENT
AND ORDER FOR PERMANENT INJUNCTION

At a session of said court held in the U.S. District Court, Eastern District of Michigan, Southern Division, Detroit, Michigan

[Filed Nov. 15, 1990]

THIS MATTER having come for trial before this Court, trial having been concluded, the jury having rendered a verdict in favor of Plaintiff, and the Court being otherwise fully advised in the premises;

IT IS HEREBY ORDERED AND ADJUDGED that judgment be and hereby is entered for Plaintiff,

VIRTUAL MAINTENANCE, INC., and against Defendant, PRIME COMPUTER, INC., in the amount of $25,359,000.00 plus statutory interest thereon from October 9, 1990 as well as costs of the suit and reasonable attorney's fees, as will hereinafter be determined.

IT IS HEREBY FURTHER ORDERED that language in any and all PRIME software service contracts pertaining to Ford required CAD/CAM applications that operate on the Prime 50 Series minicomputers, requiring the purchase of hardware maintenance as a condition for the sale of such software revisions, modifications, updates and/or support, shall be deemed unenforceable, and PRIME is hereby enjoined from entering or enforcing any such contractual language.

IT IS HEREBY FURTHER ORDERED that any such contractual language, and the hardware maintenance contracts entered into in conjunction with that contractual language, between PRIME and any of its customers shall be and hereby are deemed null and void as of the date of this order, and Defendant shall send notices advising all customers with such contracts of the terms of this injunction within sixty (60) days.

IT IS HEREBY FURTHER ORDERED that PRIME shall not charge higher prices for software revisions, modifications, updates, and/or support pertaining to Ford required CAD/CAM applications that operate on the Prime 50 Series minicomputers, regardless of whether a customer purchases hardware maintenance from PRIME or from another vendor.

IT IS HEREBY FURTHER ORDERED that no bond is necessary for the purpose of this injunction

because the jury found that there was no legitimate purpose for Defendant's tie, and because this injunction merely creates a competitive situation that had not previously existed; therefore no harm accrues to the Defendant because the Defendant is not precluded by this injunction from procuring customers through the normal competitive process.

/s/ Horace W. Gilmore
U.S. District Court Judge

APPENDIX C

UNITED STATES DISTRICT COURT
E.D. MICHIGAN, S.D.

No. 89-CV-71762-DT

VIRTUAL MAINTENANCE, INC.,
a Michigan corporation, PLAINTIFF

v.

PRIME COMPUTER, INC.,
a foreign corporation, DEFENDANT

April 20, 1990

Moll, Desenberg & Bayer by Rodger D. Young, Jamal John Hamood, Southfield, Mich., for plaintiff.

Honigman, Miller, Schwartz and Cohn by Stephen F. Wasinger, Howard B. Iwrey, Detroit, Mich., for defendant.

OPINION

GILMORE, District Judge.

This action is before the Court on Defendant's motion for summary judgment and Plaintiff's motion to amend complaint. Plaintiff, a company that provides hardware maintenance to computer users, sued Defendant, a company that supplies computer systems, distributes software and provides hardware mainte-

ance. The complaint alleged an illegal tying arrangement between software upgrades and hardware maintenance in violation of the Sherman and Clayton Acts.

Part of Defendant's business is to supply companies with computer systems, called Computer Aided Design/Computer Aided Manufacturing Systems (hereinafter CAD/CAM), used in product design. Defendant also distributes design software for the CAD/CAM systems. Defendant has an exclusive distributorship agreement with Ford Motor Co. under which Defendant distributes a software program called PDGS. A general version of this program is widely available on the market. However, Ford has modified the program to include additional design capabilities. Defendant is the sole distributor of the modified software. Ford requires all companies that provide it with design services to use the most current version of PDGS. Defendant also provides maintenance service for both software systems and hardware systems. Defendant offers a "Software Service Program" to Ford design suppliers. Subscribers receive the Ford PDGS software and all updates and revisions as part of a package that includes hardware maintenance. In order for customers to subscribe to the software service program, they must agree to allow Prime to perform hardware maintenance on their CAD/CAM systems. Customers pay $16,000 yearly for the software service program for each installation.

Customers who do not agree to have Defendant perform their hardware maintenance cannot subscribe to the software service program. Without a subscription to the software service program, customers must purchase a new software license, marketed solely by De-

fendant, every time Ford upgrades or modifies the Ford PDGS. The resulting cost to the customer is $80,000-$160,000 per year for each installation. Many customers have 20 or more installations.

I

Defendant brings the instant motion for summary judgment. It alleges that Plaintiff cannot prove illegal tying, pursuant to its burden under *Celotex Corp. v. Catrett*, 477 U.S. 317, 325, 106 S.Ct. 2548, 2553, 91 L.Ed.2d 265 (1986) ("the burden on the moving party may be discharged by 'showing' that is—pointing out to the District Court—that there is an absence of evidence to support the nonmoving party's case"); *Anderson v. Liberty Lobby, Inc.* 477 U.S. 242, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986). Defendant points to several failures of proof in Plaintiff's case. He alleges that Plaintiff has failed to establish the relevant market, that Defendant lacks sufficient market power, that there is no adverse effect on competition in the tied product market, that there are not two distinct products, that there is no allegation of conspiracy, that the tied product is a service, and, finally, that Plaintiff has failed to state a claim for interference with advantageous relations. Defendant's claims are sufficient to pass the burden to Plaintiff, who must now go beyond the pleadings and "designate 'specific facts showing that there is a genuine issue for trial' " in order to survive the instant motion. *Celotex*, 477 U.S. at 324, 106 S.Ct. at 2553.

II

Plaintiff alleges that Defendant's linking of software upgrades and modifications to hardware maintenance is an illegal tying arrangement, with Ford

PDGS as the tying product and hardware maintenance as the tied product. Plaintiff alleges that this arrangement violates the Sherman and Clayton Acts and has interfered with Plaintiff's Advantageous Relations. A tying arrangement, like that alleged by Plaintiff, is "an agreement by a party to sell one product but only on the condition that the buyer also purchases a different (or tied) product." *Northern Pacific Ry. Co., v. U.S.*, 356 U.S. 1, 5, 78 S.Ct. 514, 518, 2 L.Ed.2d 545 (1958); *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2, 12, 104 S.Ct. 1551, 1558, 80 L.Ed.2d 2 (1984). A tying agreement can violate Section 1 of the Sherman Act, 15 U.S.C. 1, and/or Section 3 of the Clayton Act, 15 U.S.C. 14. However, the Clayton Act is violated only when the tying arrangement involves two distinct products; the Sherman Act can be violated if the arrangement involves either products or services. *3 P.M., Inc. v. Basic Four Corp.*, 591 F.Supp. 1350, 1355 (E.D. Mich.1984).

Proof that a company is packaging two items together is not sufficient to prove illegal tying. *Jefferson Parish*, 466 U.S. at 11, 104 S.Ct. at 1558. Rather, packaging of two items together becomes illegal tying when a seller has sufficient market dominance or control over the tying product that it can force buyers to purchase the tied product. *Id.* at 12, 104 S.Ct. at 1558. In those circumstances, "competition on the merits in the market for the tied item is restrained, and the Sherman Act is violated." *Id.*

A plaintiff can establish an antitrust violation using either a per se standard or the "rule of reason" standard. *Jefferson Parish*, 466 U.S. at 15-16, 29-31, 104 S.Ct. at 1559-60, 1567-68. Establishment of a per se antitrust violation requires the following proof:

> First, there must be two separate products or services, with the purchase of one (the "tying product") conditioned upon the purchase of the other (the "tied product"). Second, the seller must possess sufficient economic power in the market for the tying product so that competition in the market for the tied product is appreciably restrained. Finally, a "not insubstantial" amount of commerce in the market for the tied product must be affected.

3 P.M., Inc., v. Basic Four Corp., 591 F.Supp. at 1356.

A "rule of reason" violation requires the following proof:

> Under this theory, a plaintiff is required to establish the facts peculiar to the business involved, its condition before and after the alleged restraint was applied, the nature and history of the alleged restraint, the reason for adopting the alleged restraint, and its actual or probable effect. *Chicago Board of Trade v. U.S.*, 246 U.S. 231, 38 S.Ct. 242, 62 L.Ed. 683 (1918).

3 P.M., 591 F.Supp. at 1361, n. 16. *Fortner Enterprises v. U.S. Steel*, 394 U.S. 495, 499, 89 S.Ct. 1252, 1256, 22 L.Ed.2d 495 (1969).

In this motion, the parties' arguments have focused on proof under the per se standard. The court's analysis will focus there as well. Among the many disputed issues, that most contested by the parties is the second prong of the per se test, whether Defendant has sufficient economic power in the market for the tying product to appreciably restrain competition. As the Supreme Court has made clear, in order to

determine market power, it is essential to first define the relevant market, for "without a definition of [the relevant market] there is no way to measure [the defendant's] ability to lessen or destroy competition." *Walker Process Equipment, Inc. v. Food Machinery Chemical Corp.*, 382 U.S. 172, 177, 86 S.Ct. 347, 350, 15 L.Ed.2d 247 (1965). Identifying the relevant product and geographic market is particularly significant in a tying case because the illegality of the challenged conduct "depends upon its competitive consequences, not on whether it can be labeled 'tying.'" *Jefferson Parish*, 466 U.S. at 21, n. 34, 104 S.Ct. at 1562, n. 34. It is clear that relevant market is a material issue in this case.

The Sixth Circuit determines the relevant market by a standard of interchangeability. In *A.I. Root Co. v. Computer/Dynamics, Inc.*, 806 F.2d 673 (6th Cir. 1986), the court stated:

> The essential test for ascertaining the relevant product market involves the identification of those products or services that are either (1) identical to or (2) available substitutes for the defendants' product or service . . . This comparative analysis has been characterized as the "reasonable interchangeability" standard.

Id. at 675. *See White & White v. American Hospital Supply Corp.*, 723 F.2d 495, 500 (6th Cir.1983).

Though both parties adopt the standard of interchangeability to define the relevant market, there is a clear dispute between them regarding the scope of the relevant market. Both support their claim of the relevant market by affidavits, including experts' affidavits.

Defendant relies on two affidavits in support of its claim of the appropriate market. The first, from Kenneth Tarpey, Vice President of Defendant's Customer Service, Planning and Business Development, defines a broad market in which Defendant has a very small market share. Mr. Tarpey states that there is widespread interchangeability between computer systems and software, and that computer users consider several vendors' systems before making a purchase. Because of this interchangeability, Prime sells its products to competitors' customers and competitors induce Prime customers to buy their products. Prime markets a mini-computer, but full-size computers, made by IBM, UNISYS, NCR, Digital Equipment, Hewlett-Packard, Data General and others, perform the same functions as mini-computers, and compete for Prime customers. This competition is evident in the erosion of mini-computer sales made by personal computers and computer work stations. Similarly, Mr. Tarpey states that Prime must also compete with software manufacturers, a highly competitive area. Based on the fierce competition faced by Prime, and the great interchangeability of computer products, Mr. Tarpey contends that the relevant market should be defined as the market for all computers. He identifies Prime's share of that market as less than 0.6%

Defendant next relies on the affidavit of Dr. Elisabeth M. Landes, an economic professor and consultant. She states that hardware and software maintenance are not a distinct market, but are part of the larger market for CAD/CAM computer systems, because maintenance cost and availability affect the sale of computer systems. Any price increase for software modifications, revisions and updates or hardware maintenance will increase the total price of a

CAD/CAM system, causing the vendor to lose business. Hardware maintenance can be offered either by the seller of the system or by third parties. However, the cost for hardware maintenance will affect demand for the system. It is in a vendor's interest to see that hardware maintenance at advantageous terms is available to its customers, whether through the vendor or through third parties. The linkages between a computer system and its software are such that they are not separate products. Prof. Landes concludes that the appropriate market in which to evaluate Prime's market power includes the computer systems software offered by all CAD/CAM vendors or by all CAD/CAM vendors offering mechanical CAD/CAM systems. In either market, Prime has such a small share that it does not have market power.

Plaintiff offers the affidavit of Jeffrey K. Mackie-Mason, a Professor of Economics at the University of Michigan, in support of its claim of market power. Prof. Mackie-Mason describes two particularly important markets for this case. The first, which he claims is the broadest possible correctly defined market, is "software programs used for computer-aided design and computer-aided manufacturing applications" (CAD/CAM). The second is a significantly more narrow market, defined as "software programs required by Ford Motor Co. for CAD/CAM applications." Prof. Mackie-Mason argues that Prime has sufficient market power over an appreciable number of customers within each of these markets to force a burdensome tie-in or price increase on its customers. He defines market power pursuant to the Department of Justice Merger Guidelines, which describe the relevant market for antitrust analysis as "a group of products for

which, if there were only one seller, that seller could profitably raise the price by 5% for one year. . . . The relevant market for antitrust analysis is the smallest potential market that satisfies the above condition." He states that his market, rather than the broader market defined by Defendant, satisfies the guidelines. He specifically attacks Plaintiff's broad market definition, arguing that past price increases for PDGS software demonstrate that Prime has the power to raise prices 5% and more, thus satisfying the definition for relevant market.

Market definition is key to evaluating Plaintiff's antitrust claim under the per se standard. The determination of relevant market is a question of fact. *White & White, Inc. v. American Hospital Supply Corp.*, 723 F.2d 495, 499-500 (6th Cir.1983) (finding of fact subject to the "clearly erroneous" standard). *Heatransfer Corp. v. Volkswagenwerk, A.G.*, 553 F.2d 964, 979 (6th Cir.1977); *Telex v. IBM Corp.*, 510 F.2d 894, 915 (10th Cir.) *cert. dismissed* 423 U.S. 802, 96 S.Ct. 8, 46 L.Ed.2d 244 (1975).

There is substantial evidence produced by both sides in support of their version of market power. The expert opinions directly clash. It would be improper, under these circumstances, for this court to make a determination of the relevant market without hearing cross-examination of the experts and viewing the expert testimony in the more complete factual context of tral. As *Celotex, supra*, makes clear, summary judgment is improper when there is a genuine issue of material fact. *Id.* 477 U.S. at 322, 106 S.Ct. at 2552. Moreover, there is direct expert clash on other issues of fact, material under the *3 P.M.* test, including whether the products are separate and whether PDGS is unique. The court will not evaluate

these in detail because the factual question regarding relevant market share is itself sufficient to preclude summary judgment.

This determination does not conflict with recent Sixth Circuit cases affirming grants of summary judgment to antitrust defendants. In *International Logistics Group v. Chrysler Corp.*, 884 F.2d 904 (6th Cir.1989), the court determined that Plaintiff had failed to satisfy its burden of proof in defining and proving the relevant market. The court stated that market power must be "proved," not "assumed." *Id.* at 908. The court reasoned that the Plaintiff had to prove, using the rule of interchangeability, that there were no reasonable substitutes available, but had failed to do so. *Id.* In the instant suit, Plaintiff has claimed that PDGS is unique because it is modified by Ford, that only Prime sells this modified version, and that Ford requires use of this version by its design suppliers. These claims are supported by expert affidavit. Plaintiff has provided enough evidence of no reasonable substitutes to survive summary judgment.

In *A.I. Root Co. v. Computer/Dynamics, Inc.*, 806 F.2d at 677, the court found dispositive the fact that Plaintiff could not prove that the product was unique and that the market was consequently narrowly defined. This court distinguishes *A.I. Root* by determining that Plaintiff has provided sufficient evidence that PDGS is unique to support its narrow market definition on a motion for summary judgment. The claim of uniqueness is disputed by Defendant's expert, but resolution of that dispute is properly reserved for trial. *See General Business Systems, Inc. v. North American Phillips Corp.*, 699 F.2d 965, 973 (9th Cir.1983) (plaintiff failed to present substantial

evidence of its market definition); *3 PM v. Basic Four Corp.*, 591 F.Supp. 1350 (E.D.Mich.1984) (failure to present evidence that Defendant had economic power in the relevant market made summary judgment appropriate).

Summary judgment, though disfavored in a complex antitrust case, *Poller v. Columbia Broadcasting System, Inc.*, 368 U.S. 464, 82 S.Ct. 486, 7 L.Ed.2d 458 (1962), can be granted when Plaintiff has failed to demonstrate any legal theory under the asserted version of the facts which can support an illegal tie. *A.I. Root v. Computer/Dynamics, Inc.*, 806 F.2d at 675. However, in the instant matter, Plaintiff has alleged facts, which if true, could potentially support a verdict. Moreover, Plaintiff has designated, by expert affidavit, several genuine issues of material fact, most notably the relevant product market, that make summary judgment in this matter inappropriate. The court denies Defendant's motion for summary judgment.

III

Heard with this motion was a motion by Plaintiff to amend its complaint. The proposed amended complaint adds no new claims, but clarifies Plaintiff's market definition. Though the requested amendment comes late in the course of this action, Defendant has stipulated to the amendment. Fed.R.Civ.P. 15(a) provides that leave to appeal "shall be freely given." Consequently, Plaintiff's motion for leave to amend is granted.

APPENDIX D

UNITED STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT

Nos. 90-2249/91-1273

VIRTUAL MAINTENANCE, INC., PLAINTIFF-APPELLEE

v.

PRIME COMPUTER, INC., DEFENDANT-APPELLANT

ORDER

[Filed Apr. 13, 1992]

Before: JONES and SUHRHEINRICH, Circuit Judges; and LIVELY, Senior Circuit Judge.

The court having received a petition for rehearing en banc, and the petition having been circulated not only to the original panel members but also to all other active judges of this court, and no judge of this court having requested a vote on the suggestion for rehearing en banc, the petition for rehearing has been referred to the original hearing panel.

The panel has further reviewed the petition for rehearing and concludes that the issues raised in the petition were fully considered upon the original submission and decision of the case. Accordingly, the petition is denied.

ENTERED BY ORDER OF THE COURT

/s/ Leonard Green
LEONARD GREEN
Clerk